Bureau of Land Management

Grand Junction, Colorado

Hawxhurst Land Exchange Environmental Assessment Mesa County, Colorado

ENSR Consulting and Engineering

March 1993

Document Number 7239-001-500

BUREAU OF LAND MANAGEMENT GRAND JUNCTION DISTRICT OFFICE

DECISION RECORD

EA Number CO-073-3-25 Project Name: Hawxhurst Land Exchange Case File: COC-50884 and RMP Amendment

Finding of No Significant Impact: Based on the analysis of potential environmental impacts contained in the attached environmental assessment, I have determined that the Preferred Alternative and associated Plan Amendment will not have any significant impacts on the human environment and that an Environmental Impact Statement is not required.

AMENDMENT OF GRAND JUNCTION RESOURCE MANAGEMENT PLAN

Decision: Approve amendment of the Grand Junction Resource Management Plan to change the category of the following lands in Mesa County, Colorado, from retention to disposal by land exchange:

Sixth Principal Meridian, Colorado

T. 9 S., R. 94 W.,

sec. 8, E1/2SW1/4, SE1/4;

sec. 9, SW1/4;

sec. 16, N1/2NW1/4;

sec. 17, NE1/4, N1/2SE1/4;

sec. 18, Lots 1, 2 and 3, NE1/4, E1/2NW1/4, NE1/4SW1/4, NW1/4SE1/4.

T. 9 S., R. 95 W.,

sec. 13, SE1/4NE1/4NE1/4.

Rationale: This decision allows the Bureau of Land Management (BLM) to proceed with the Hawxhurst land exchange in which the BLM will acquire, through exchange and purchase with Land and Water Conservation Fund monies, a private inholding along the Colorado River which has been identified as important for public use and resource management of the Ruby Canyon portion of the Colorado River.

The decision allows for disposal of only the lands described above and only through exchange. If the exchange is not consummated, the lands would remain public ownership and would not be sold. Future exchange proposals would be judged solely on a net public benefit analysis and then, if found to be of public benefit, would be analyzed fully through an environmental assessment.

A major concern of many residents of Collbran and the Plateau Valley was that the loss of Public Land in the area would have a negative economic effect on the area. The Environmental Assessment (EA) prepared to analyze the effects of the proposed Resource Management Plan Amendment and land exchange revealed no significant economic effects. The property values in the area should not be affected by this action and neither sales tax nor property tax revenue to local government was projected to change significantly. Additionally, the Division of Wildlife does not feel that fewer hunters will come to the area, so there should be no negative economic impacts to the area from a loss of revenue from hunters.

Recommended by: District Manager

3/26/93 Date

Annroyed by

Martia 1.11a
State Director

3-30-93 Date

HAWXHURST LAND EXCHANGE

Decision: Select the Grassy Gulch alternative and exchange the above mentioned public lands for a portion of the following private land with the remainder of the private land to be purchased with Land and Water Conservation Fund (LWCF) monies. The exchange will not be consummated until BLM has LWCF monies to purchase the remaining portion of the Horsethief Ranch.

The Grassy Gulch parcel:

Sixth Principal Meridian, Colorado

T. 9 S., R. 94 W.,

sec. 3, Lots 1, 2, 3 and 4, S1/2NW1/4, SW1/4, N1/2SE1/4, SW1/4SE1/4;

sec. 10, NW1/4NE1/4, N1/2NW1/4; AND,

The Horsethief Ranch:

Ute Principal Meridian, Colorado

T. 1 N., R. 3 W.,

sec. 7, Lots 3, 4 and 5, SW1/4NE1/4, E1/2NW1/4;

sec. 8, Lots 2, 4, 5 and 6, NE1/4SE1/4, SE1/4NE1/4; sec. 9, S1/2NW1/4, NW1/4SW1/4.

Excluding the house, it's appurtenances and up to 40 acres.

The offered land will include an easement for public access through the excluded acreage, as necessary.

The exchange of the public lands will be made subject to:

- 1. A reservation to the United States of a right-of-way for ditches and canals constructed by authority of the United States, Act of August 30, 1890 (43 U.S.C. 945).
- 2. A reservation to the United States of oil, gas and coal, along with the right of ingress and egress to explore for and extract these minerals, and subject to the rights of prior permittees or lessees to use so much of the surface of the land as is required for proper mining operations, without compensation to the patentee for damages resulting from proper mining operations for the duration of the following oil and gas leases and any authorized extension of the leases Colorado 44749, 46740, 49215, 49216, 49511, 52263; and Colorado 09523C (which is held by production).

Rationale: The Grassy Gulch alternative was found to provide a net public benefit and was selected as the preferred alternative. This option allows the BLM to acquire the Horsethief Ranch property along the Colorado River. Although converting public land to private in the Collbran area, it also provided for the acquisition of 640 acres of private land in the same general area.

Consolidation of public land along the Colorado River in the Ruby Canyon area is identified as a priority in the Ruby Canyon Corridor Land Acquisition Project and Land and Water Conservation Fund monies were appropriated to gain these properties. The BLM tried to acquire the Horsethief property in the past, but wasn't able to come to agreement with the prior landowner over price.

Hawxhurst Ranches purchased this property with the intent to offer it to the BLM in exchange for property next to their existing ranch near Collbran. The exchange was proposed and with the Grassy Gulch parcel included as part of the offered land, an equal value exchange is likely to not cover the value of the entire Horsethief property; therefore, the remainder of that property will be offered to the BLM for purchase with Land and Water Conservation Fund monies at an appraised value approved by BLM.

In addition to consolidation of ownership along the Colorado River corridor which will help in management flexibility in Ruby Canyon, the Horsethief property provides riparian habitat for bald eagles, other raptors and waterfowl. The river adjacent to the property is proposed critical habitat for the Colorado squawfish and razorback sucker. Peregrine falcons nest on the rocky cliffs along the river in Ruby Canyon and increasing numbers may result in nests on or adjacent to the Horsethief property. Fishermen and waterfowl hunters who frequent adjacent areas will be provided with additional river access. Mountain biking opportunities adjacent to Kokopelli's Trail exist on the property. The shoreline along a portion of the property is a flat gravel area that float boaters could use for a variety of activities.

The BLM land selected by the proponent near Collbran provides good habitat for mule deer, elk and wild turkeys. Loss of this habitat is partially offset in the Grassy Gulch alternative by acquisition of the 640 acre Grassy Gulch parcel which has a higher potential vegetative production than that of the selected land. Additionally, since the proponent has agreed to manage the selected land in conformance with the Conservation Easement that is on the rest of the Hawxhurst Ranch, there should be no degradation of the habitat.

The BLM is reserving oil, gas and coal on the selected lands and existing leases will not be impacted.

Hawxhurst Ranch has agreed to take the reduction in Animal Unit Months resulting from the exchange, so no other grazing permittee in the Hawxhurst Common Allotment will have a change in authorized grazing privileges.

The Colorado Division of Wildlife does not expect that the exchange would result in the loss of any hunters in this area, thus no economic impact to the Plateau Valley from a decrease of hunter dollars is expected.

The Grassy Gulch alternative provides additional foot and horseback access into the area between Brush and Kimball Creeks and helps block up public land in this area.

Other alternatives analyzed included the Proposed Action, the 160 Acre alternative and No Action.

The Proposed Action surfaced the concerns of the residents of the Collbran area regarding loss of public land in their part of Mesa County to acquire private land along the Colorado River in western Mesa County. The Grassy Gulch alternative helped address those concerns by converting 640 acres of private land to public in the Collbran area.

The 160 acre alternative was developed as a result of the public scoping process and provides better access than the Grassy Gulch alternative because OHV access to this area was added. The Grassy Gulch alternative helps block up private and public land in this area, but the 160 acre alternative eliminated an

additional Hawxhurst Ranch inholding.

The reason the Grassy Gulch alternative was selected as the preferred alternative instead of the 160 acre alternative is that the proponent, Hawkhurst Ranch, would not agree to offer the additional 160 acres of private land, and therefore to select that alternative would result in no exchange and the loss of the opportunity for public ownership of the Horsethief property.

Acquisition through direct purchase had been attempted in the past with the previous owner of the Horsethief Ranch, but the BLM's approved appraised value did not meet his expectations so the purchase did not occur. Hawxhurst Ranch is not interested in selling the Horsethief property except as a part of the exchange process.

The No Action alternative would result in no exchange and would leave the BLM without a willing seller resulting in the loss of the opportunity for public ownership of the Horsethief property.

The BLM believes that the acquisition of the Horsethief property and Grassy Gulch property clearly provides a net public benefit.

Recommended by Atlanta (1)

Novu | m

3/25/93

Approved by:

District Manager

3/26/43

7239-001-500

HAWXHURST LAND EXCHANGE ENVIRONMENTAL ASSESSMENT MESA COUNTY, COLORADO

Prepared for

BUREAU OF LAND MANAGEMENT Grand Junction, Colorado

Prepared by

ENSR Consulting and Engineering Fort Collins, Colorado

SUMMARY

This environmental assessment (EA) describes the environmental effects of a proposed land exchange between the Hawxhurst Ranch Company (Hawxhurst) and the Bureau of Land Management (BLM), Grand Junction Resource Area (GJRA). The exchange is being proposed under the provisions of the Federal Land Policy and Management Act of 1976 (FLPMA) (43 USC 1716) permitting land exchanges and acquisition. Hawxhurst proposes to convey to the United States of America approximately 594 acres along the Colorado River, a parcel commonly known as the Horsethief Ranch, through a combination land exchange and fee sale. Hawxhurst wishes to exchange the Horsethief Ranch lands (offered lands) for approximately 1,090 acres of public land (selected lands) adjacent to the Hawxhurst Ranch near the community of Collbran in Mesa County, Colorado. Offered lands are those the proponent (Hawxhurst) offers to the BLM in exchange for BLM lands (i.e., private to BLM). Selected lands are the BLM lands that the proponent (Hawxhurst) wants to acquire (i.e., BLM to private).

The lands selected by the proponent in the proposed land exchange were not identified for disposal in the GJRA Resource Management Plan (RMP). If the decision is made to complete an exchange, the RMP would be amended to dispose of the selected lands per Federal regulations. This EA serves as the analysis for the potential plan amendment and as a Biological Evaluation for the U.S. Fish and Wildlife Service (USFWS) relating to Threatened and Endangered Species.

Purpose and Need for the Exchange

Hawxhurst's purpose for the proposed land exchange generally consists of squaring and consolidating private ownership of the Hawxhurst Ranch. Such action would reduce trespass problems on the Hawxhurst Ranch and facilitate its management. BLM's purpose for considering the proposed land exchange include the following reasons.

- Protection of Wildlife Habitat: Horsethief Canyon is recognized for its importance as wildlife habitat, particularly for endangered species.
- Preservation of the Colorado River Corridor: Acquisition of Horsethief Ranch would protect an additional 1.75 miles of Colorado River frontage from development;
 protecting the area for wildlife and continued growth of recreational opportunities.

- Protection and Enhancement of Wilderness Values: The Black Ridge Canyons Wilderness Study Area (WSA) is located along the south side of the Colorado River, immediately south of the Horsethief Ranch.
- Protection of Wild and Scenic River Values: This stretch of the Colorado River has been recommended for inclusion as a "scenic river" in the National System of Wild and Scenic Rivers.
- Protection and Enhancement of Recreational Opportunities: Acquisition of Horsethief Ranch would enhance BLM's ability to meet the anticipated need for recreational opportunities in the GJRA.

Alternatives Including the Proposed Action

Proposed Action

The Proposed Action consists of a land exchange between Hawxhurst and the BLM. Hawxhurst proposes to convey to the United States of America approximately 594 acres along the Colorado River, a parcel commonly known as the Horsethief Ranch, through a combination land exchange and fee sale. Hawxhurst wishes to exchange the Horsethief Ranch lands (offered lands) for approximately 1,090 acres of BLM-administered public land (selected lands) adjacent to the Hawxhurst Ranch near the community of Collbran in Mesa County, Colorado.

The portion of the Horsethief Ranch to be exchanged for the 1,090 acres of BLM-managed land would be equal value for equal value as determined by an independent appraisal approved by the BLM. The appraisal would be prepared in conformance with the Uniform Appraisal Standards for Federal Land Acquisitions issued by the Interagency Land Acquisition Conference in 1992. The BLM would exchange the property near the Hawxhurst Ranch for an amount of land on the Horsethief Ranch of equal value. Additional information regarding the appraisal process is included in Appendix A of the EA. At the BLM's request, the existing residence and up to 40 acres surrounding the residence would not be included in the exchange and would remain in private ownership. An easement would be granted to the BLM on that part of the access road traversing the property retained by Hawxhurst. If the Horsethief Ranch is found to be of greater value (acre per acre) than the Hawxhurst lands, the BLM will purchase the remainder of the Horsethief Ranch at the appraised value with Land and Water Conservation Funds (LWCF) previously appropriated for this purpose.

After the exchange has been finalized and recorded with the Mesa County Clerk and Recorder, the Hawxhurst Ranch Company would take possession of the 1,090 acres adjacent to current



ranch property. The private owner would then be permitted all private property rights in conformance with Mesa County ordinances and as guaranteed by the State of Colorado and the United States of America. Hawxhurst Ranch owners plan to continue using the property for ranching and wildlife habitat.

Likewise, the United States of America, under the jurisdiction of the BLM, would acquire the Horsethief Ranch property less the residence and up to 40 acres. The Horsethief Ranch property would then be opened to the public.

Grassy Gulch Alternative (Preferred Alternative)

The Grassy Gulch Alternative of the land exchange would be the same as the Proposed Action except it would also involve the Hawxhurst Ranch's 640-acre parcel known as the Grassy Gulch parcel, located approximately 2 miles northeast of the ranch headquarters. This parcel would be offered to the BLM in addition to the Horsethief Ranch property. These lands would be offered in exchange for an additional 160 acres adjacent to the main body of the Hawxhurst Ranch. The BLM 80-acre parcel surrounded on three sides by the Grassy Gulch parcel would remain in Federal ownership. Under this alternative, the BLM would acquire 1,240 acres from Hawxhurst. In exchange, Hawxhurst would receive 1,170 acres of Federal land.

This alternative was developed by Hawxhurst in response to public desires for additional access to the BLM and National Forest lands on the south slope of Battlement Mesa. It was also proposed as a means of reducing the net loss of public lands in the Plateau Valley which has been expressed as a concern by members of the community. Prior to proposing this alternative, Hawxhurst discussed the merits of the Grassy Gulch Alternative with a wide variety of interests in the Plateau Valley, including the Collbran Town Council, the Collbran Chamber of Commerce, and a number of members of the community.

As with the Proposed Action, a BLM-approved independent appraisal would determine the exchange ratio. The BLM would acquire the Grassy Gulch parcel and a smaller portion of the Horsethief Ranch through exchange. The BLM would then purchase the remaining acreage of the Horsethief Ranch less up to 40 acres and the existing residence, with LWCF monies appropriated for the purpose.

160-Acre Alternative

The BLM identified this alternative in response to comments received at the open houses held in June 1992. The 160-Acre Alternative would consist of the addition of a 160-acre parcel of the Hawxhurst Ranch located north of the ranch headquarters. This parcel is currently surrounded by BLM-managed lands and controls road access coming south from the National Forest both on to the south and to the east. This alternative would make available to the BLM the 160-acre parcel, the 640-acre Grassy Gulch parcel, and an even smaller portion of the Horsethief Ranch through exchange. The lands selected by Hawxhurst in exchange for these parcels would be the same as those described for the Grassy Gulch Alternative. It should be noted that the proponent (Hawxhurst) has not offered to exchange the 160-acre parcel but it was examined to satisfy the range of alternative requirements of the National Environmental Policy Act of 1969 (NEPA).

As with the Proposed Action, an independent appraisal approved by the BLM would determine the exchange ratio of the different parcels. The BLM would acquire the 160-acre inholding, the 640-acre Grassy Gulch parcel, and a smaller portion of the Horsethief Ranch through exchange. The BLM would then purchase fee-simple the balance of the Horsethief Ranch with LWCF monies previously appropriated for that purpose.

No Action Alternative (Continuation of Present Management)

Offered Lands (Private to BLM). The offered land in the Horsethief area would remain in private ownership and could be subdivided and developed with large lot (35+ acres) residential units. The BLM would continue attempting to purchase river properties along Ruby Canyon with LWCF money.

The offered land in the Hawxhurst area would continue to be managed for grazing and wildlife under the terms of the existing Conservation Easement.

<u>Selected Lands (BLM to Private)</u>. Under this alternative, the selected Federal lands would not be patented and would remain in Federal ownership. Current uses that would continue are grazing, wildlife habitat management, and extensive recreation.

Lands in the Hawxhurst area would be managed according to the GJRA RMP. The RMP defines particular management actions that would be applied under the various emphasis areas across the GJRA. These lands are located in Area CO-2, Emphasis on Oil and Gas.



Summary Comparison of Impacts Conclusion

The Summary Table provides an opportunity to compare the potential impacts of the Proposed Action and each alternative. The table lists possible impacts, both positive and negative, by resource and critical element as they were covered in the EA.

Resource/Critical Elen	nent Proposed Action	Grassy Gulch Alternative (Preferred Alternative)	160-Acre Alternative	No Action Alternative
Acres (Total)				
Selected Lands ¹	1,090	1,170	1,170	0.
Offered Lands ²	594	1,240	1,400	0
Air Quality				
Selected Lands	Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action
Offered Lands	Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action
<u>Noise</u>				
Selected Lands	Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action
Offered Lands	Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action
Special Management Are	a <u>s</u>		en e	
Selected Lands	Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action
Offered Lands	Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

Table S-1 (Continued)

Resource/Critical	Element	Proposed Action		Grassy Gulch Alternative) (Preferred Alternative)		160-Acre Alternative)	No Action Alternative
Prime Farmland		1				1		
Selected Lands		Not affected		Same as the Proposed Action		Same as the Proposed Action		Same as the Proposed Action
Offered Lands		Not affected	en in Le Maria	Same as the Proposed Action	٧.,	Same as the Proposed Action		Same as the Proposed Action
Floodplains				• •			ł.	
Selected Lands		Not affected	· . ·	Same as the Proposed Action		Same as the Proposed Action		Same as the Proposed Action
Offered Lands		Public acquisition of floodplains along the Colorado River		Same as the Proposed Action		Same as the Proposed Action	: :	Floodplains along the Colorado River would remain in private ownership
Hazardous Wastes		· · · · · · · · · · · · · · · · · · ·	•	:		·		· .
Selected Lands		Not affected	uš.	Same as the Proposed Action		Same as the Proposed Action		Same as the Proposed Action
Offered Lands		Not affected		Same as the Proposed Action		Same as the Proposed Action		Same as the Proposed Action
Water Quality					1	.•		
Selected Lands		Not affected		Same as the Proposed Action		Same as the Proposed Action	2	Same as the Proposed Action
Offered Lands		Not affected		Same as the Proposed Action		Same as the Proposed Action		Same as the Proposed Action

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

Resource/Critical E	Element	Proposed Action	Grassy Gulch Alternative (Preferred Alternative)	160-Acre Alternative	No Action Alternative
Native American Relic	gious				
Selected Lands		Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action
Offered Lands		Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action
Wetlands/Riparian					
Selected Lands		Transferring 1 acre of riparian vegetation to private ownership is not expected to have an impact because management is not likely to change	Same as the Proposed Action	Same as the Proposed Action	1 acre of riparian vegetation along Hawxhurst Creek would remain in Federal ownership
Offered Lands		Acquisition of 61 acres of riparian vegetation along the Colorado River to Federal management would be a beneficial impact, particularly for waterfowl and other wildlife management	Same as the Proposed Action	Same as the Proposed Action, except an additional 1 acre of riparian vegetation, for a net increase of 62 acres, would be transferred to the Federal government	The potential for a net increase to the Federal government of over 60 acres of riparian vegetation would not be available
Wild and Scenic Rive	<u>rs</u>				
Selected Lands		Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

Resource/Critical	Element	Proposed Action	Grassy Gulch Alternative (Preferred Alternative)	160-Acre Alternative	No Action Alternative
Offered Lands	a .	Acquisition and management by the Federal government would improve the quality of the visitor experience on this section of the Colorado River because it would preclude development along the river corridor	Same as the Proposed Action	Same as the Proposed Action	Development of the Horsethief property could degrade the quality of the visitor experience on this section of the Colorado River
Wilderness			4		
Selected Lands		Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action
Offered Lands		The view from the Black Ridge Canyons WSA would be maintained because potential development of the property into residential sites would be eliminated	Same as the Proposed Action	Same as the Proposed Action	No affect except development of the Horsethief property could degrade the view from the WSA
<u>Minerals</u>			•		
Selected Lands		BLM reserves coal and oil and gas mineral rights; lands still open to leasing with standard terms	Same as the Proposed Action	Same as the Proposed Action	BLM lands would still be open to leasing with standard terms; the recent withdrawals for locatable minerals would expire in May 1994

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

Table S-1 (Continued)

Resource/Critical	Proposed Action	Grassy Gulch Alternative (Preferred Alternative)	160-Acre Alternative	No Action Alternative
Offered Lands	40 acres of privately owned mineral estate along the Colorado River would revert to Federal ownership and management	Same as the Proposed Action	Same as the Proposed Action except an additional 160 acres of private coal and oil and gas mineral rights would be transferred to the Federal government and would be open to leasing with standard terms	40 to 200 acres of mineral estate would remain in private ownership and would not be available for public leasing with BLM's standard lease terms or protection
Vegetation				
Selected Lands	Not affected; 714 acres pinyon-juniper, 375 acres mountain shrub, and 1 acre riparian transferred from public to private	Same as the Proposed Action, except an additional 18 acres pinyon-juniper and 62 acres mountain shrub transferred from public to private	Same as the Grassy Gulch Alternative	Not affected
Offered Lands	Not affected; 455 acres saltbush, 77 pinyon-juniper, and 62 acres riparian transferred from private to public	Same as the Proposed Action, except the Grassy Gulch parcel contains a large population of Hound's tongue and a thistle infestation; an additional 640 acres mountain shrub transferred from private to public	Same as the Grassy Gulch Alternative, except an additional 160-acre parcel containing some riparian and mountain shrub plus cleared pastureland would be transferred from private to public	Not affected
Soils				
Selected Lands	Not affected	Same as the Proposed	Same as the Proposed	Same as the Proposed Action

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

Proposed Action	Grassy Gulch Alternative (Preferred Alternative)	160-Acre Alternative	No Action Alternative
1.75 miles of riparian wildlife habitat transferred from private to public, increasing management flexibility along the river	Same as the Proposed Action, except Grassy Gulch parcel would be managed with wildlife as a priority and public management flexibility would also be increased in the Hawxhurst area	Same as the Grassy Gulch Alternative, except the 160-acre parcel would also be managed with a wildlife priority, further increasing flexibility in management	Development of the Horsethief Ranch would negatively effect wildlife values and habitat; the Grassy Gulch and 160-acre parcels would continue to be managed under the terms of the existing Conservation Easement
No effect would be expected	Same as the Proposed Action	Same as the Grassy Gulch Alternative	No effect
Acquisition of high use bald eagle winter range, potential black-footed ferret habitat, peregrine falcon migratory hunting territory, and	Same as the Proposed Action, except an additional special status plant species could occur on the Grassy Gulch parcel	Same as the Grassy Gulch Alternative	Development of the Horsethief property would negatively effect several special status wildlife and plant species
1.75 miles of Colorado River frontage. This section of river is proposed critical habitat for the Colorado squawfish and razorback			
•	1.75 miles of riparian wildlife habitat transferred from private to public, increasing management flexibility along the river No effect would be expected Acquisition of high use bald eagle winter range, potential black-footed ferret habitat, peregrine falcon migratory hunting territory, and 1.75 miles of Colorado River frontage. This section of river is proposed critical habitat for the Colorado	1.75 miles of riparian wildlife habitat transferred from private to public, increasing management flexibility along the river No effect would be expected Acquisition of high use bald eagle winter range, potential black-footed ferret habitat, peregrine falcon migratory hunting territory, and 1.75 miles of Colorado River frontage. This section of river is proposed critical habitat for the Colorado Same as the Proposed with wildlife as a priority and public management flexibility would also be increased in the Hawxhurst area Same as the Proposed Action, except an additional special status plant species could occur on the Grassy Gulch parcel	1.75 miles of riparian wildlife habitat transferred from private to public, increasing management flexibility along the river Same as the Proposed Action, except Grassy Gulch parcel would be managed with a wildlife as a priority and public management flexibility would also be increased in the Hawxhurst area No effect would be expected Same as the Proposed Action, except the 160-acre parcel would also be managed with a wildlife priority, further increasing flexibility in management the Hawxhurst area Same as the Grassy Gulch Alternative. Same as the Grassy Gulch Alternative Same as the Grassy Gulch Alternative

plant species potentially occur on the offered lands

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

Table S-1 (Continued)

Resource/Critical	Element	Proposed Action	Grassy Gulch Alternative (Preferred Alternative)	160-Acre Alternative	No Action Alternative
Cultural and Paleont Resources	ological				
Selected Lands		No effect	Same as the Proposed Action	Same as the Proposed Action	No known effect; however, sites on public lands are more accessible than
Offered Lands		No known sites or resources; potential sites may be more likely to be affected if they are transferred to the Federal government, even though better protected by law	Same as the Proposed Action	Same as the Proposed Action	those on private lands No known effect; access to these lands would remain restricted and the potential for unauthorized collecting and digging would be minimized.
Economic Activity Selected Lands		CDOW does not anticipate changes in hunting activity, therefore no adverse impacts to the local economy would be expected	Same as the Proposed Action	Same as the Proposed Action	Not affected
Offered Lands		Any potential increase in expenditures by non-local recreationists would represent an economic benefit	Same as the Proposed Action	Same as the Proposed Action	Any potential economic benefits associated with acquisition of the Horsethief property, or the Grassy Gulch and 160-acre parcels would not be realized

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

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Table S-1 (Continued)

Resource/Critical Element	Proposed Action	Grassy Gulch Alternative (Preferred Alternative)	160-Acre Alternative	No Action Alternative
Property Values				
Selected Lands	Not affected	Same as the Proposed Action	Same as the Proposed Action	Not affected
Offered Lands	Not affected	Same as the Proposed Action	Same as the Proposed Action	Not affected
Fiscal Conditions	1 ja			;
Selected Lands	Virtually no impact would be felt	Essentially the same as the Proposed Action	Essentially the same as the Proposed Action	No impact
Offered Lands	Virtually no impact would be felt	Essentially the same as the Proposed Action	Essentially the same as the Proposed Action	No impact
Social Characteristics	Qualitative assessment. Both positive and negative impacts would be perceived	Same as the Proposed Action, except more people in the Collbran area expressed support of this alternative	Same as the Grassy Gulch Alternative, except this alternative appears to some to represent a more equitable trade. Several exchange opponents indicated they would not oppose this alternative	Opponents would perceive that their input had been considered; however, supporters of acquiring the Horsethief property would be disappointed

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

Grassy Gulch Alternative

(Preferred Alternative)

Action, except an additional

recreation activities; however, this would be offset by

acquisition and management of the Grassy Gulch parcel by the BLM (see below)

Same as the Proposed

80 acres of public land

public hunting or other

Same as the Proposed

OHV use

Action, except an additional

640 acres would be opened

to public hunting, hiking, and

would not be available for

1	ماممه	C	_:
Lives	LOCK	Gla	zing

Offered Lands

Selected Lands Redu

Resource/Critical Element

Recreation

Selected Lands

Reduction of 76 AUMs on the Hawxhurst Common Allotment

Proposed Action

CDOW does not anticipate a

change in hunter days in the

Collbran area; however, this

crowding and a decrease in

the success rate and quality

of the hunting experience

BLM projects 2,800 visitor

Horsethief property

days of use per year on the

could result in more

Same as the Proposed
Action, except an additional
6 AUMs would be decreased
from the Hawxhurst
Common Allotment; this
would be offset by
acquisition of the Grassy
Gulch parcel by the BLM
(see below)

Same as the Grassy Gulch Alternative

160-Acre Alternative

Not affected

No Action Alternative

Same as the Grassy Gulch Alternative, except an additional 160 acres would be opened to public hunting, hiking, and OHV use

days of use per year on the Horsethief property would not be available

Potential for 2,800 visitor

Same as the Grassy Gulch Alternative

Not affected

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

Table S-1 (Continued)

Resource/Critical	Element	Proposed Action	Grassy Gulch Alternative (Preferred Alternative)	160-Acre Alternative	No Action Alternative
Offered Lands		No additional grazing would be permitted and existing grazing of the riparian area would be controlled	Same as the Proposed Action, except an additional 46 AUMs would be initially allocated on the Grassy Gulch parcel by the BLM	Same as the Grassy Gulch Alternative, except an additional 11 AUMs would be initially allocated on the 160-acre parcel by the BLM	Potential for control over grazing in the Colorado River riparian area and additional AUMs on the Grassy Gulch and 160-acre parcels would not be available
Access (Roads and	Trails)		. •		
Selected Lands		Not affected; do not control access to other BLM lands	Same as the Proposed Action	Same as the Proposed Action	Not affected
Offered Lands		Horsethief property and Colorado River would become more accessible to the public	Same as the Proposed Action, except additional pedestrian and horse access would be available coming south from the National Forest	Same as the Grassy Gulch Alternative, except additional access would be available through the 160-acre parcel	The potential for additional public access through the Horsethief Ranch, to the Colorado River, and through the Grassy Gulch and 160-acre parcels would not be available
Visual Resources				:	
Selected Lands		Not affected	Same as the Proposed Action	Same as the Proposed Action	Not affected
Offered Lands		Would ensure the visual preservation of the Colorado River corridor and the viewshed of the Black Ridge Canyons WSA	Same as the Proposed Action	Same as the Proposed Action	Development of the Horsethief property would negatively impact the views from the Black Ridge Canyons WSA and the Colorado River

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.



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1.0 INTRODUCTION

This environmental assessment (EA) describes the environmental effects of a proposed land exchange between the Hawxhurst Ranch Company (Hawxhurst) and the Bureau of Land Management (BLM), Grand Junction Resource Area (GJRA). The exchange is being proposed under the provisions of the Federal Land Policy and Management Act of 1976 (FLPMA) (43 USC 1716) permitting land exchanges and acquisition. Hawxhurst proposes to convey to the United States of America approximately 594 acres along the Colorado River, a parcel commonly known as the Horsethief Ranch, through a combination land exchange and fee sale. Hawxhurst wishes to exchange the Horsethief Ranch lands (offered lands) for approximately 1,090 acres of public land (selected lands) adjacent to the Hawxhurst Ranch near the community of Collbran in Mesa County, Colorado (see Figure 1-1). Offered lands are those the proponent (Hawxhurst) offers to the BLM in exchange for BLM lands (i.e., private to BLM). Selected lands are the BLM lands that the proponent (Hawxhurst) wants to acquire (i.e., BLM to private).

The EA is not a decision document. It is a record disclosing the environmental consequences of implementing a Proposed Action and alternatives to that action. It is an important document for Federal, state, and local governments to use in reaching their individual decisions regarding the Proposed Action.

This EA focuses on the environmental effects associated with the Proposed Action on the BLM GJRA. Impacts on other Federal, state, and local jurisdictions resulting from the Proposed Action and alternatives are disclosed in this EA, as well. Through consultation, other Federal, state, and local jurisdictions have assisted the BLM in disclosing the consequences of the Proposed Action and other reasonable and prudent alternatives.

The lands selected by the proponent in the proposed land exchange were not identified for disposal in the GJRA Resource Management Plan (RMP). If the decision is made to complete an exchange, the RMP would be amended to dispose of the selected lands per Federal regulations. This EA serves as the analysis for the potential plan amendment and as a Biological Evaluation for the U.S. Fish and Wildlife Service (USFWS) relating to Threatened and Endangered Species.

This EA addresses the environmental effects of the Proposed Action and three alternatives referred to as the Grassy Gulch Alternative (Preferred Alternative), the 160-Acre Alternative, and the No Action Alternative (Continuation of Current Management).

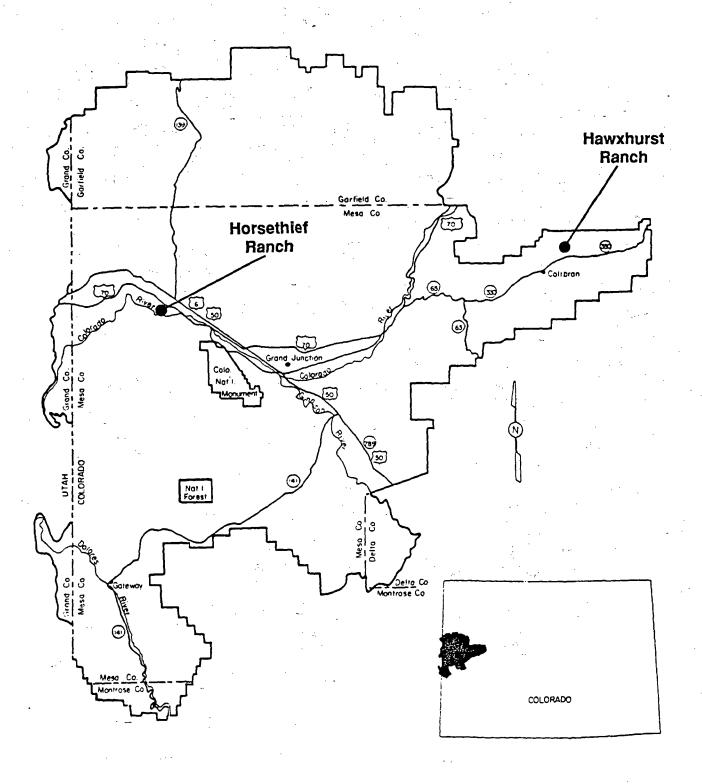


Figure 1-1. Hawxhurst Land Exchange - General Location Map.



1.1 Purpose and Need for the Exchange

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Hawxhurst's purpose for the proposed land exchange generally consists of squaring and consolidating private ownership of the Hawxhurst Ranch. Such action would reduce trespass problems on the Hawxhurst Ranch and facilitate its management. BLM's purpose for considering the proposed land exchange include the following reasons.

Protection of Wildlife Habitat: Horsethief Canyon is recognized for its importance as wildlife habitat. The Wildlife Resource Information System (WRIS) maintained by the Colorado Division of Wildlife (CDOW) has been accessed to determine the presence of sensitive wildlife species in the area, including Federally listed threatened or endangered species. This research revealed that bald eagles, golden eagles, and peregrine falcons use Horsethief Ranch and the adjoining areas. Fishes, Canada geese, and mallards also are strategic wildlife here.

Preservation of the River Corridor: The Colorado Riverfront Commission, in conjunction with Mesa County, Colorado, the Colorado Division of Parks and Outdoor Recreation and others, is actively involved in the protection and enhancement of the Colorado River corridor from Palisade to Loma and beyond. Acquisition of Horsethief Ranch would protect an additional 1.75 miles of Colorado River frontage from development; protecting the area for wildlife and continued growth of recreational opportunities.

Protection and Enhancement of Wilderness Values: In 1980, the BLM published a report titled, Intensive Wilderness Inventory - Final Wilderness Study Areas, in response to the requirements of the Wilderness Act of 1964 and FLPMA. This report identified 72,408 acres in the Black Ridge Canyons and Black Ridge Canyons West as wilderness study areas (WSAs). The GJRA Final Wilderness Environmental Impact Statement (EIS) issued in November 1989 by the BLM recommended that Congress designate a total of 73,937 acres in the combined Black Ridge Canyons and Black Ridge Canyons West WSA (the Combined WSA) for permanent wilderness protection. Congress has not acted on this recommendation to date. However, BLM's analysis of this area confirms the significance of the area's natural features. The Black Ridge Canyons (combined) WSA is located along the south side of the Colorado River, immediately south of the Horsethief Ranch. Federal acquisition of private property adjacent to the WSA would eliminate concern that the area would be developed and prevent degradation of the viewshed.

Protection of Wild and Scenic River Values: The Horsethief Ranch acquisition would include 1.75 miles of Colorado River frontage. This stretch of the Colorado River has been recommended for inclusion as a "scenic river" in the National System of Wild and Scenic

Rivers. At present, the use of Horsethief Ranch is consistent with the scenic river classification. However, if additional residential units or other uses were developed on the property, the scenic character of the river would be disturbed.

Protection and Enhancement of Recreational Opportunities: Acquisition of Horsethief Ranch would enhance BLM's ability to meet the anticipated need for recreational opportunities in the GJRA. These include river related recreational opportunities such as providing easy river access for fishermen and waterfowl hunters plus additional mountain biking and hiking opportunities on the adjacent upland property.

1.2 Project History

In the spring of 1991, the Hawxhurst Ranch Company, through Western Land Group, Inc., proposed to exchange the Horsethief Ranch for approximately 2,720 acres of BLM lands on the south slope of Battlement Mesa and adjacent to the Hawxhurst Ranch. The purpose of the exchange was to consolidate private land for improved ranch management and decreased incidence of trespass. The lands requested were identified for retention in the GJRA RMP. Therefore, the BLM held meetings in June 1991 to determine public interest in amending the RMP to permit the exchange.

On July 1, 1991 the exchange proposal was denied by BLM. The decision cited several reasons for denying the exchange proposal including potential adverse impacts on management and public use on the entire 6,440-acre block of BLM land near Hawxhurst Ranch, and other environmental and human resource concerns.

Following rejection of the original exchange proposal, Hawxhurst modified the exchange proposal, attempting to respond to BLM's concerns as cited in the initial rejection. This revised proposal was submitted to BLM on August 15, 1991 and accepted by BLM for consideration on September 25, 1991.

1.3 Public Notification and Scoping

On May 22, 1992, a Notice of Intent/Notice of Realty Action and announcement of open house meetings was published in the *Federal Register* (see Appendix C). This marked the beginning of the scoping process. Starting the week of May 24, 1992, for three consecutive weeks, news releases appeared in local papers. The news releases indicated the status of the land exchange proposal and the intent to continue into the environmental review process. Public information meetings also were announced. On June 5, 1992, a news letter was sent to over 1,200 interested parties.



In conjunction with the comment period, two open houses were held to identify major issues and concerns. These meetings were held at two locations:

- Grand Junction, Colorado June 16, 1992
- Collbran, Colorado June 17, 1992

The open houses were informally structured opportunities for sharing information. Attendees were given a brief synopsis of the proposal and environmental process, and requested to help the BLM clarify the issues to be addressed in the EA. Comment sheets were provided for issue identification. Members of the public were encouraged to talk with BLM employees stationed at maps and photos representing each alternative. Forty-four persons signed the register at the Grand Junction meeting and 75 persons signed-in at the Collbran meeting.

Written comments concerning the proposed exchange were accepted by the BLM. During the scoping period, a total of 135 comment letters were submitted to the BLM; 3 were submitted from special interest groups, 4 from government agencies, and 128 from individuals. A petition identifying issues to be analyzed also was received.

1.4 Issues Identified

The public comments expressed at the open houses and in the comment letters were analyzed to determine what issues would be addressed in this EA and which issues would not be addressed. The issues, concerns, and opportunities addressed in this EA are expressed by resource below for tracking and focusing purposes.

1.4.1 Issues Addressed in the EA

Purpose and Need

- Concern that the net of the exchange will be less total public property.
- Concern that the exchange is not in the public interest.
- Federal government should buy the Horsethief Ranch in fee.

Wildlife

What will be the effect on elk and deer populations.

- What will be the overall effect on wildlife habitat.
- Concern that the exchange would leave no prime wildlife habitat for future generations.

Economics

- What will be the effect on land values in the Collbran area.
- What will be the effect on the local economy.

Social Characteristics

• What will be the effect on the "quality of life" in the Collbran area.

Recreation

- Concern that the exchange will take prime elk and deer hunting areas out of the public domain.
- What will be the effect on Kokopelli's Trail.
- Concern that the Horsethief area is not a good boat launch area because of a steep access road approaching a shallow wide section of the river.

Land Use and Access

- How will the exchange affect public access in the Collbran area and along the Colorado River corridor.
- Concern that the proposed exchange is not consistent with the BLM's RMP.
- What will be the effect on potential future exchanges involving retention lands.
- What will be the effect on livestock grazing.
- Concern that the exchange will limit public access to public land even more than the existing land pattern.

Other

- What will happen to the water rights.
- What will be the effect on mineral rights.

1.4.2 Issues not Addressed in the EA

During the course of the scoping process, a number of comments were received. Some of these comments expressed personal opinions while others raised larger national policy questions which are beyond the scope of this EA. The following comments were made during the scoping process, but were not considered appropriate for analysis in this EA.

- Public land should never be traded.
- Loss of agriculturally-based ranches to recreation-based ranches is not in the national interest.
- Money will "get its way" over public opposition.
- The acreage of the exchange is unfair. It should be acre for acre.
- The asking price of the Horsethief Ranch is too high.
- Loss of public land for the good of one person.
- The private landowner will come back for more once he has set a precedent for the exchange.
- People who would use the Horsethief Ranch should pay for the land.

1.5 Conformance with Existing Grand Junction Resource Management Plan

The GJRA RMP and Record of Decision (ROD) dated January 1987 provides direction for future management decisions by resource (i.e., coal, minerals, land tenure) and geographic areas referred to as "emphasis areas." The BLM lands which would be transferred to Hawxhurst under the exchange proposal are within "Area CO-2" which is managed with an emphasis on oil and gas.



While management for oil and gas is the emphasis for this area, the accomplishment of other resource management objectives (i.e., land tenure adjustments, wildlife, recreation, livestock grazing) is encouraged. With specific regards to land tenure adjustments, the stated objective is "to adjust public land patterns to consolidate land for improved management efficiency and to acquire suitable private land with special resource values." The RMP goes on to discuss the primary criteria for identification of private lands to be acquired by BLM and guidelines for lands which should be disposed. The RMP further provides that the BLM may consider land exchanges which would (1) improve management efficiency or (2) result in the acquisition of private property with high resource values.

In addition, acquisition criteria as stated in the RMP include, among others:

- Private land needed for management of wild and scenic rivers and study areas.
- Potential national or historic trails.
- Potential natural or research natural areas.
- Potential areas for cultural or natural history designation.
- Private land with potential for other Congressional designations.
- Riparian habitat areas.
- Valuable recreation areas.

BLM has determined that the land exchange proposal may meet these criteria and is worthy of further analysis in this EA. The BLM lands identified by Hawxhurst for acquisition have been classified for "retention." If the exchange is to be completed, these lands will be reclassified for "disposal". This reclassification requires an amendment of the RMP. The Notice of Intent to amend the RMP was published in the *Federal Register* on May 22, 1992 along with the Notice of Realty Action (see Appendix C).

1.6 Relationship to Other Policies, Plans, and Programs

In 1991, the BLM GJRA prepared an EA examining the acquisition of 16 parcels of private land in the Ruby Canyon, Colorado River corridor. The 16 acquisition parcels were not specifically identified in the GJRA RMP, but they met the acquisition criteria. Congress appropriated Land and Water Conservation Funds (LWCF) to purchase these parcels as they become available. Acquisition would occur through exchange for other BLM lands, or through purchase using LWCF funds or other sources. The general need for the proposed acquisitions was consolidation of public land ownership to preclude development and incompatible uses that would impair recreation opportunities along the river corridor, protect wilderness values, and maintain the scenic character along the river. The Horsethief Ranch was one of the parcels



examined in the EA for acquisition by the BLM. The proposed land exchange is consistent with this acquisition program.

In addition, the Horsethief Ranch is located within a larger area which has been proposed for designation as the Ruby Canyon National Conservation Area (NCA). BLM is preparing the Black Ridge-Ruby Canyon Integrated Management Plan which will address this area. Acquisition of the Horsethief property would be consistent with current planning.

The Mesa County Land Use and Development Policies identify the Colorado River and floodplain, and Horsethief and Ruby Canyon as major natural features of national, statewide, and regional significance. It is the policy of Mesa County that these significant natural features will be maintained in their natural state and development will be discouraged on or near each of the natural features. Acquisition of the Horsethief property would be consistent with this policy.

The U.S. Forest Service is in the process of updating its travel management plan for the Grand Mesa National Forest. The existing plan stipulates motorized trail-sized vehicle use on designated routes on the Battlements, adjoining BLM and the Grassy Gulch parcel north of the proposed exchange. Public vehicular access to the BLM land in this area is on trails coming south from the Forest. The existing plan does not address non-Forest Service traffic or transportation. According to the Forest Service, the updated plan will not address any changes to travel management on the Battlements (Jacobson 1992).

2.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION

2.1 Proposed Action

The Proposed Action being considered in this environmental assessment (EA) consists of a land exchange between the Hawxhurst Ranch Company (Hawxhurst) and the Bureau of Land Management (BLM), Grand Junction Resource Area (GJRA). The exchange is being proposed under the provisions of the Federal Land Policy and Management Act of 1976 (FLPMA) (43 USC 1716) permitting land exchanges and acquisition. Hawxhurst proposes to convey to the United States of America approximately 594 acres along the Colorado River, a parcel commonly known as the Horsethief Ranch, through a combination land exchange and fee sale (see Figure 2-1). Hawxhurst wishes to exchange the Horsethief Ranch lands (offered lands) for approximately 1,090 acres of BLM-administered public land (selected lands) adjacent to the Hawxhurst Ranch near the community of Collbran in Mesa County, Colorado (see Figure 2-2).

The legal descriptions of the lands in the Proposed Action are given below. Acreages are rounded to the nearest 10 acres except on the Horsethief property (i.e., offered lands).

Offered Lands (Private to BLM)

Township 1 North, Range 3 West, Ute Principal Meridian, Mesa County, Colorado

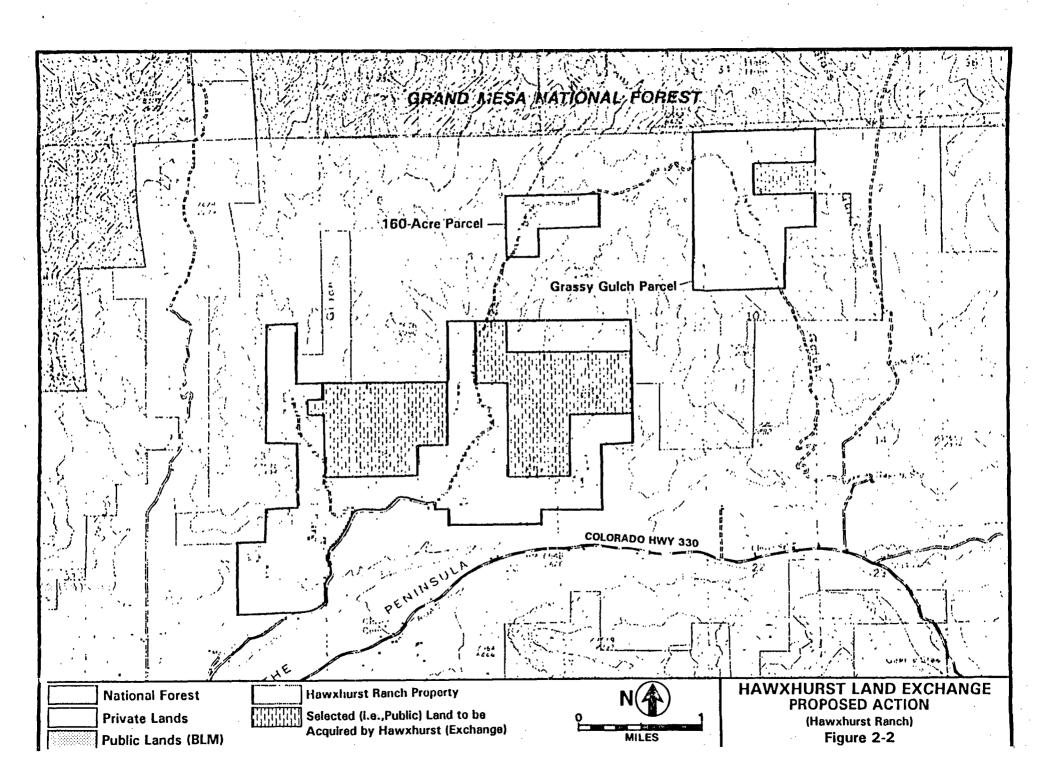
- Sec 7 Lots 3, 4, and 5 SW1/4 NE1/4, and E1/2 NW1/4
- Sec 8 Lots 2, 4, 5, and 6 NE1/4 SE1/4, and SE1/4 NE1/4
- Sec 9 S1/2 NW1/4, and NW1/4 SW1/4
 Less up to 40 acres and the existing residence. A public access easement will be acquired by the BLM across this parcel.

Approximately 594 acres

Selected Lands (BLM to Private)

Township 9 South, Range 94 West, 6th Principal Meridian, Mesa County, Colorado

- Sec 3 S1/2 NE1/4
- Sec 8 S1/2 SE1/4, and E1/2 SW1/4



Sec 9 S1/2 SW1/4

Sec 16 N1/2NW1/4

Sec 17 NE1/4, and N1/2SE/1/4

Sec 18 Lots 1, 2, and 3, NE1/4, E1/2 NW1/4, NE1/4 SW1/4, NW1/4 SE1/4

Township 9 South, Range 95 West, 6th Principal Meridian, Mesa County, Colorado

Sec 13 SE1/4 NE1/4 NE1/4

Approximately 1,090 acres

The portion of the Horsethief Ranch to be exchanged for the 1,090 acres of BLM-managed land would be equal value for equal value as determined by an independent appraisal approved by the BLM. The appraisal would be prepared in conformance with the Uniform Appraisal Standards for Federal Land Acquisitions issued by the Interagency Land Acquisition Conference in 1992. The BLM would exchange the property near the Hawxhurst Ranch for an amount of land on the Horsethief Ranch of equal value. Additional information regarding the appraisal process is included in Appendix A. At BLM's request, the existing residence and up to 40 acres surrounding the residence would not be included in the exchange and would remain in private ownership. An easement would be granted to the BLM on that part of the existing access road traversing the property retained by Hawxhurst. If the Horsethief Ranch is found to be of greater value (acre per acre) than the Hawxhurst lands, the BLM will purchase the remainder of the Horsethief Ranch at the appraised value with Land and Water Conservation Funds (LWCF) previously appropriated for this purpose.

After the exchange has been finalized and recorded with the Mesa County Clerk and Recorder, the Hawxhurst Ranch Company would take possession of the 1,090 acres adjacent to current ranch property. The private owner would then be permitted all private property rights in conformance with Mesa County ordinances and as guaranteed by the State of Colorado and the United States of America. Hawxhurst Ranch owners plan to continue using the property for ranching and wildlife habitat.

Likewise, the United States of America, under the jurisdiction of the BLM, would acquire the Horsethief Ranch property less the residence and up to 40 acres. The Horsethief Ranch property would then be opened to the public.

2.2 Grassy Gulch Alternative (Preferred Alternative)

The Grassy Gulch Alternative of the land exchange would be the same as the Proposed Action except it also would involve the Hawxhurst Ranch's 640-acre parcel known as the Grassy Gulch parcel, located approximately 2 miles northeast of the ranch headquarters. This parcel would be offered to the BLM in addition to the Horsethief Ranch property. These lands would be offered in exchange for an additional 160 acres adjacent to the main body of the Hawxhurst Ranch. The BLM 80-acre parcel surrounded on three sides by the Grassy Gulch parcel would remain in Federal ownership. Under this alternative, the BLM would acquire 1,240 acres from Hawxhurst. In exchange, Hawxhurst would receive 1,170 acres of Federal land (see Figure 2-3).

This alternative was developed by Hawxhurst in response to public desires for additional access to the BLM and National Forest lands on the south slope of Battlement Mesa. It also was proposed as a means of reducing the net loss of public lands in the Plateau Valley which has been expressed as a concern by members of the community. Prior to proposing this alternative, Hawxhurst discussed the merits of the Grassy Gulch Alternative with a wide variety of interests in the Plateau Valley, including the Collbran Town Council, the Collbran Chamber of Commerce, and a number of members of the community.

The legal descriptions of the lands involved in the Grassy Gulch Alternative are given below.

Offered Lands (Private to BLM)

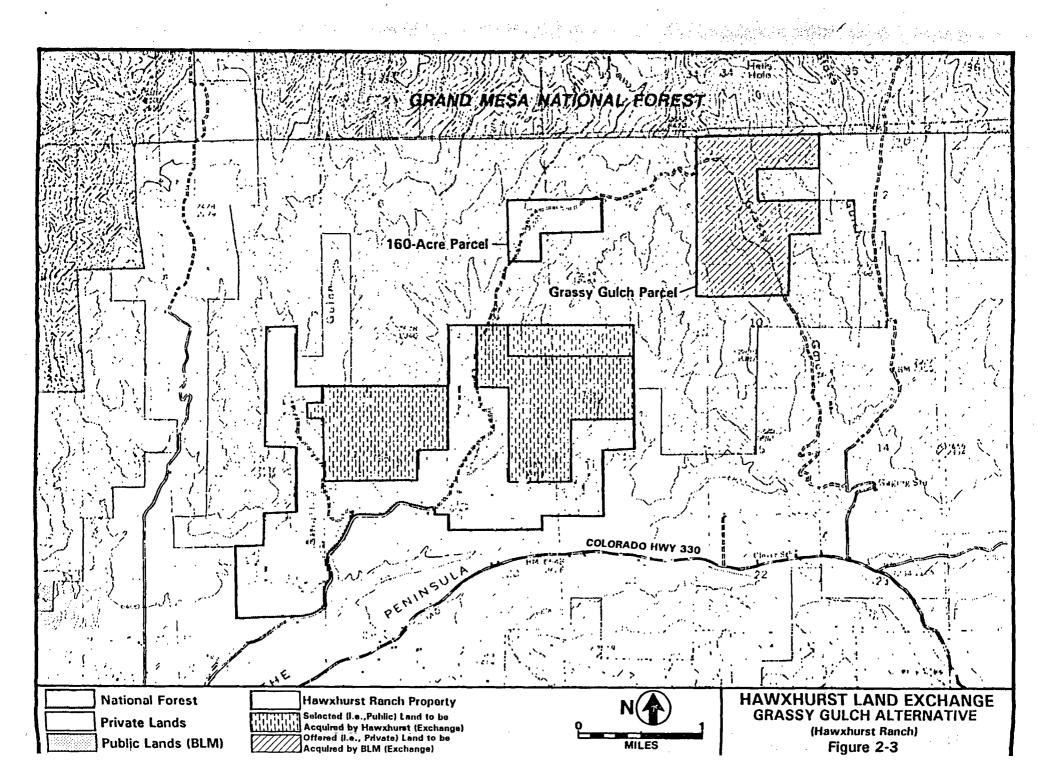
Township 1 North, Range 3 West, Ute Principal Meridian, Mesa County, Colorado

- Sec 7 Lots 3, 4, and 5 SW1/4 NE1/4, and E1/2 NW1/4
- Sec 8 Lots 2, 4, 5, and 6 NE1/4 SE1/4, and SE1/4 NE1/4
- Sec 9 S1/2 NW1/4, and NW1/4 SW1/4
 Less up to 40 acres and the existing residence. A public access easement will be acquired by the BLM across this parcel.

Township 9 South, Range 94 West 6th Principal Meridian, Mesa County, Colorado

Sec 3 Lots 1, 2, 3, and 4, S1/2 NW1/4, SW1/4, N1/2 SE1/4, SW1/4 SE1/4 Sec 10 NW1/4 NE1/4, N1/2 NW1/4

Approximately 1,240 acres



Selected Lands (BLM to Private)

Township 9 South, Range 94 West, 6th Principal Meridian, Mesa County, Colorado

Sec 8 E1/2 SW1/4, SE1/4

Sec 9 SW1/4

Sec 16 N1/2NW1/4

Sec 17 NE1/4, and N1/2SE/1/4

Sec 18 Lots 1, 2, 3, NE1/4, E1/2 NW1/4, NE1/4 SW1/4, NW1/4 SE1/4

Township 9 South, Range 95 West, 6th Principal Meridian, Mesa County, Colorado

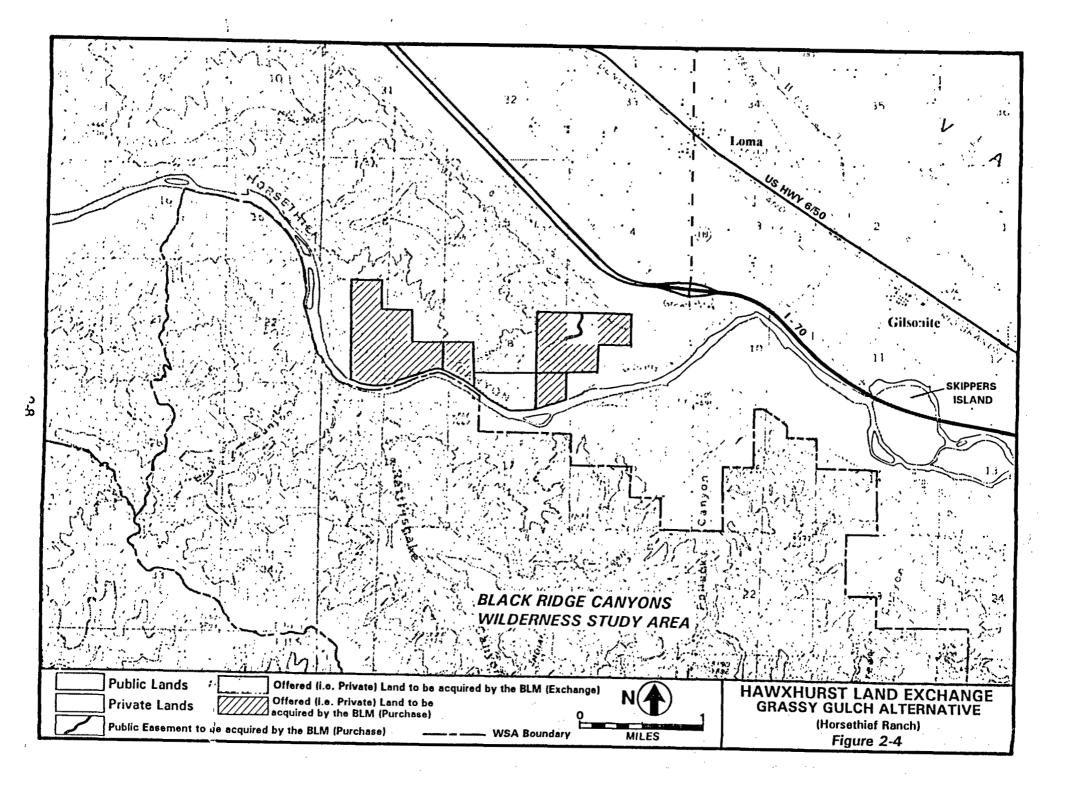
Sec 13 SE1/4 NE1/4 NE1/4

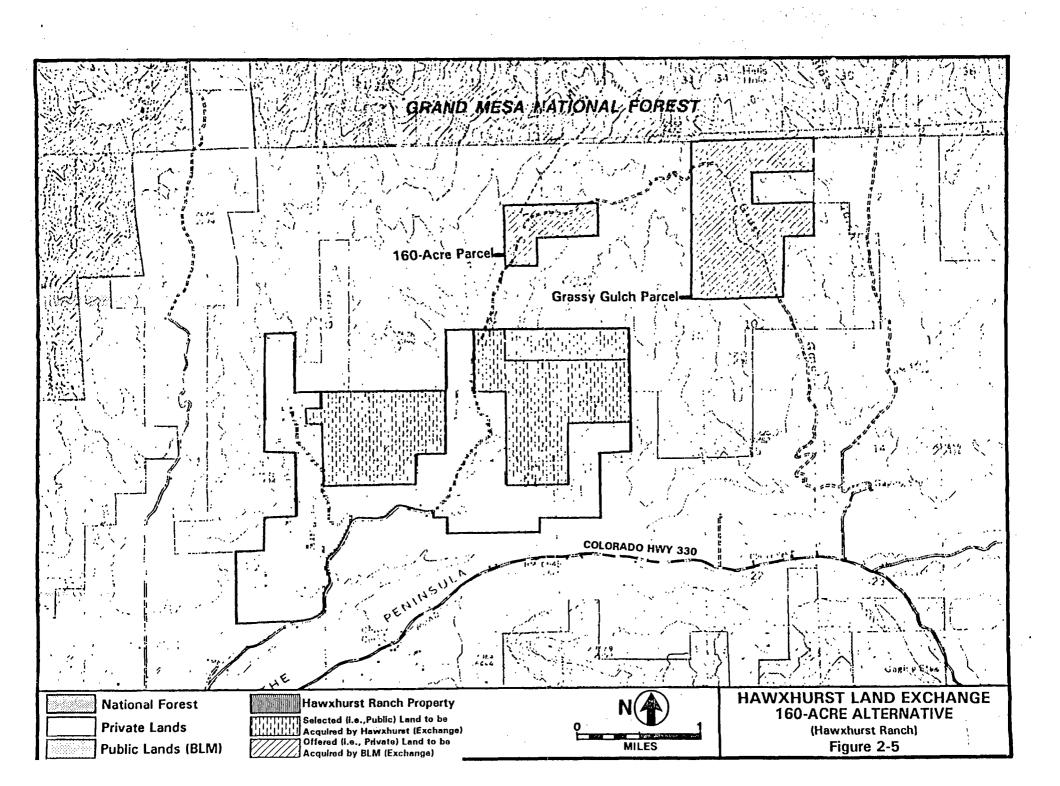
Approximately 1,170 acres

As with the Proposed Action, a BLM-approved independent appraisal would determine the exchange ratio. The BLM would acquire the Grassy Gulch parcel and a smaller portion of the Horsethief Ranch through exchange. The BLM would then purchase the remaining acreage of the Horsethief Ranch less up to 40 acres and the existing residence, with LWCF monies appropriated for the purpose (see Figure 2-4).

2.3 160-Acre Alternative

The BLM identified this alternative in response to comments received at the open houses held in June 1992. The 160-Acre Alternative would consist of the addition of a 160-acre parcel of the Hawxhurst Ranch located north of the ranch headquarters (see Figure 2-5). This parcel is currently surrounded by BLM-managed lands and controls road access coming south from the National Forest both on to the south and to the east. This alternative would make available to the BLM the 160-acre parcel, the 640-acre Grassy Gulch parcel, and an even smaller portion of the Horsethief Ranch through exchange. The lands selected by Hawxhurst in exchange for these parcels would be the same as those described for the Grassy Gulch Alternative. It should be noted that the proponent (Hawxhurst) has not offered to exchange the 160-acre parcel but it was examined to satisfy the range of alternative requirements of the National Environmental Policy Act of 1969 (NEPA).





Following is a legal description of those lands involved in the 160-Acre Alternative.

Offered Lands (Private to BLM)

Township 1 North, Range 3 West, Ute Principal Meridian, Mesa County, Colorado

Sec 7 Lots 3, 4, and 5 SW1/4 NE1/4, and E1/2 NW1/4

Sec 8 Lots 2, 4, 5, and 6 NE1/4 SE1/4, and SE1/4 NE1/4

Sec 9 S1/2 NW1/4, and NW1/4 SW1/4 Less up to 40 acres and the existing residence. A public access easement will be acquired by the BLM across this parcel.

Township 9 South, Range 94 West 6th Principal Meridian, Mesa County, Colorado

Sec 3 Lots 1, 2, 3, and 4, S1/2 NW1/4, SW1/4, N1/2 SE1/4, SW1/4 SE1/4

Sec 4 NW1/4 SW1/4

Sec 5 N1/2SE1/4 and SW1/4SE1/4

Sec 10 NW1/4 NE 1/4 and N1/2NW1/4

Approximately 1,400 acres

Selected Lands (BLM to Private)

Township 9 South, Range 94 West, 6th Principal Meridian, Mesa County, Colorado

Sec 8 E1/2 SW1/4, SE1/4

Sec 9 SW1/4

Sec 16 N1/2NW1/4

Sec 17 NE1/4, and N1/2SE/1/4

Sec 18 Lots 1, 2, and 3, NE1/4, E1/2 NW1/4, NE1/4 SW1/4, NW1/4 SE1/4

Township 9 South, Range 95 West, 6th P.M., Mesa County, Colorado

Sec 13 SE1/4 NE1/4 NE1/4

Approximately 1,170 acres



As with the Proposed Action, an independent appraisal approved by the BLM would determine the exchange ratio of the different parcels. The BLM would then acquire the 160-acre inholding, the 640-acre Grassy Gulch parcel, and a smaller portion of the Horsethief Ranch through exchange. The BLM would then purchase the balance of the Horsethief Ranch less the residence and up to 40 acres with LWCF monies previously appropriated for that purpose (see Figure 2-6).

2.4 No Action Alternative (Continuation of Present Management)

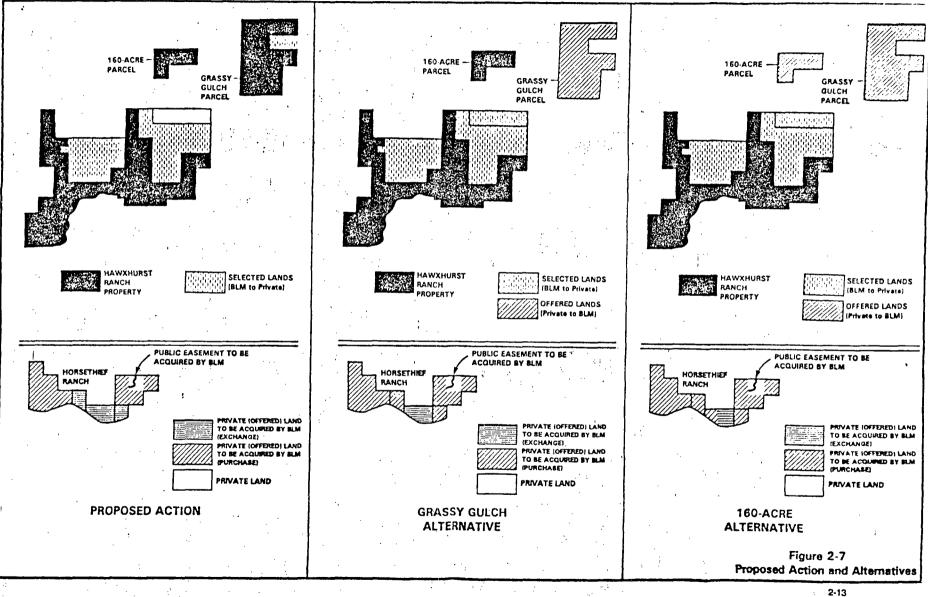
Under this alternative, the selected Federal and offered non-Federal lands involved in the proposed land exchange would not change ownership status. Public lands in the Hawxhurst area would continue to be utilized for wildlife habitat, livestock_grazing, and recreation. The Horsethief Ranch would remain in private ownership and not open to the general public.

2.5 Alternatives Considered but Eliminated from Further Analysis

- 1) Direct Purchase of Horsethief Property: The BLM attempted this alternative with the previous landowner; however, there were considerable property value differences between the BLM and landowner, and the sale was not completed. The current proponent (Hawxhurst) will sell to the BLM at approved appraisal value only in conjunction with an exchange.
- 2) Forest Service Jurisdiction: This alternative would put the BLM-administered lands in the Collbran area under Forest Service jurisdiction. This alternative would require a boundary adjustment to the National Forest. This action would require Congressional approval. The Forest Service did not indicate any interest in this alternative.
- Acquire Easement through 160-Acre Parcel: Since the proponent (Hawxhurst) will not make available the 160-acre parcel or any interest therein, this alternative proposal was not analyzed.

2.6 Comparison of the Proposed Action and Alternatives

Figure 2-7 provides an opportunity to graphically compare the Proposed Action and each alternative.



3.0 AFFECTED ENVIRONMENT

3.1 Introduction

This chapter discusses the affected environment of the proposed land exchange and alternatives. Only those resources that would be affected and critical elements are addressed.

3.2 General Setting

The Bureau of Land Management (BLM), Grand Junction Resource Area (GJRA) is located in the extreme west-central portion of Colorado. It includes portions of Delta, Garfield, Mesa, and Montrose Counties. The lands under consideration in the proposed land exchange and alternatives are located entirely within Mesa County, Colorado, and include public lands under the administration of the GJRA and privately owned lands.

The selected lands (BLM to private) are located along the southern erosional flank of Battlement Mesa. Most of the area is underlain by the Wasatch and Green River Formations, which are Paleocene-Eocene in age (Tweto et al. 1978). The terrain is fairly rugged, consisting of moderate to steeply sloping ridges and side slopes that are generally north-south trending, and dipping to the south. Elevations range from about 6,560 feet above mean sea level (msl) on the southwestern parcel to 8,160 feet above msl on the northeastern parcel.

The offered lands (private to BLM) are located on the north bank of the Colorado River, south of I-70, and southwest of the community of Loma. Several formations are exposed on the Horsethief property, including the Dakota Sandstone, Burro Canyon, Morrison, Summerville, Entrada Sandstone, Kayenta, Wingate Sandstone, and Chinle Formations. Elevations range from about 4,440 feet above msl at the Colorado River to 4,800 feet above msl on the northeastern portion of the parcel.

3.3 Air Quality and Noise

Air quality in the primarily rural region is good because of the general lack of industrial activity. The region, including Mesa County, is designated as an Environmental Protection Agency (EPA) attainment area for all criteria pollutants. In addition, the region is designated as a Class II Prevention of Significant Deterioration (PSD) area. Class II PSD areas are allowed moderate deterioration of present conditions if they are in attainment status.



Because of the rural, agricultural, and low-density residential land uses, existing ambient noise levels in the project area are generally quite low. It is estimated that day-night average levels (Ldn) are in the 35 to 40 dBA range for most of the project area.

3.4 Special Management Areas

Special Management Areas (SMAs) are those that require some special management and that meet the criteria for critical environmental concern designation. According to the GJRA Resource Management Plan (RMP) (January 1987), the nearest SMA to the selected lands (e.g., the Hawxhurst Ranch) is the Pyramid Rock research natural area (RNA) and area of critical environmental concern (ACEC), located approximately 20 miles west of the selected lands. The nearest SMA to the offered lands (e.g., the Horsethief property) is the Fruita Paleontological Site RNA and ACEC, located approximately 5 miles southeast of the offered lands.

3.5 Prime Farmland

There are no prime farmlands or farmlands of statewide importance associated with the selected or offered lands.

3.6 Floodplains

The proposed land exchange or alternatives would not disturb any floodplains. The proposed exchange would result in public acquisition of floodplains along the Colorado River.

3.7 Hazardous Wastes

The BLM conducted a hazardous waste audit of the selected and offered lands and no hazardous waste sites were discovered.

3.8 Water Quality

3.8.1 Selected Lands (BLM to Private)

Plateau Creek and all its tributaries (which include Hawxhurst Creek and Buzzard Creek within and adjacent to the selected lands) are classified as Segment 15 of the Lower Colorado River Basin by the Colorado Department of Health (CDH). Segment 15 is designated Coldwater Aquatic Life Class 1-capable of supporting trout. It also is designated as Recreation Class 2 - suitable for incidental body contact (limited only by its temperature), as a water supply, and for agricultural use. All water quality parameters are within adopted standards.

3.8.2 Offered Lands (Private to BLM)

The section of the Colorado River adjacent to the Horsethief property (offered lands) is classified by CDH as Segment 3 of the Lower Colorado River Basin. This entire segment, from the confluence of the Gunnison River to the Colorado/Utah border, is designated Warmwater Aquatic Life Class 1 - due to its water quality and other attributes, it is capable of supporting a wide range of aquatic life. It also is designated as Recreation Class 1 - suitable for full body contact (e.g., swimming) as well as agricultural use. All water quality parameters are within adopted standards for this segment of the Colorado River except for iron. The iron value of 2.6 milligrams per liter (mg/l) exceeds the standard, and is attributed to the heavy suspended solids load carried by the river in this segment (Owen 1992).

3.9 Native American Religious Concerns

The appropriate Native American groups were contacted via letter on July 30, 1992 to solicit their input regarding the proposed land exchange. To date, the BLM has received no response to this inquiry.

3.10 Wetlands/Riparian

3.10.1 Selected Lands (BLM to Private)

There is approximately 1 acre of riparian vegetation, with cottonwoods and boxelders, located along Hawxhurst Creek on the selected lands.

3.10.2 Offered Lands (Private to BLM)

There are approximately 62 acres of riparian vegetation, with cottonwoods and tamarisk, located along the Colorado River on the Horsethief property. There is no riparian vegetation on the Grassy Gulch parcel. There is approximately 1 acre of riparian vegetation, with shrubs and non-woody species, located on the 160-acre parcel.

3.11 Wild and Scenic Rivers

3.11.1 Selected Lands (BLM to Private)

There are no designated, recommended, or potential wild and scenic rivers on or in the vicinity of the selected lands.

3.11.2 Offered Lands (Private to BLM)

The Colorado River adjacent to the Horsethief property has been studied and meets the criteria for "scenic" designation. There are no designated, recommended, or potential wild and scenic rivers on or in the vicinity of the Grassy Gulch and 160-acre parcels.

3.12 Wilderness

3.12.1 Selected Lands (BLM to Private)

There are no designated, proposed, or recommended wilderness areas in the vicinity of the selected lands.

3.12.2 Offered Lands (Private to BLM)

The Black Ridge Canyons Wilderness Study Area (WSA), which is proposed for wilderness designation, is located along the south side of the Colorado River, immediately across the river corridor from the Horsethief Ranch. There are no designated, proposed, or recommended wilderness ares in the vicinity of the Grassy Gulch or 160-acre parcels.

3.13 Minerals

3.13.1 Selected Lands (BLM to Private)

The Federal government owns all of the mineral estate within these selected lands. The entire acreage is classified by the U. S. Geological Survey (USGS) as prospectively valuable (PV) for oil and gas, and all selected lands are covered by oil and gas leases. The southwestern parcel and that portion of the central parcel in Sections 16 and 17 are classified as PV for coal. The parcels were segregated from locatable mineral entry in May 1992. At that time, according to the most recent mining claim recordation database and verbal confirmation with the State office recordation staff, there were no mining claims on the selected lands. Any claims filed after that date would not be valid.

No mineral material sites have been located within these selected lands. Most of the surface consists of exposures of Green River and Wasatch Formations, which are comprised of sandstone, claystone, and maristone. These rocks may have some potential for building and decorative stone, but are not considered to be the major source material for these uses.



3.13.2 Offered Lands (Private to BLM)

Alluvial deposits and gravel terraces predominate at the lower elevations near the Colorado River. Only the extreme northeast corner of the parcel, where the Dakota Sandstone Formation is exposed, is classified as PV for coal. None of the Horsethief property is classified as PV for oil and gas (Fowler 1992). The Federal government owns all of the mineral estate on the Horsethief property except for a 40-acre parcel in Section 9, which is privately owned. The presence or absence of saleable minerals is undetermined (Fowler 1992). The Federal government owns all the mineral estate on the Grassy Gulch parcel. The mineral estate on the 160-acre parcel is privately owned.

3.14 Soils and Vegetation

3.14.1 Selected Lands (BLM to Private)

Vegetation on the selected land in the Hawxhurst area consists of two vegetation types: mountain mahogany-scrub oak (*Cercocarpus-Quercus*) and pinyon-juniper woodland (*Juniperus-Pinus*) (Kuchler 1975). Mountain mahogany-scrub oak is a transitional vegetation type at lower elevations between the grassland and semi-desert and at higher elevations between woodland or coniferous forest (Harrington 1964). Pinyon-juniper stands are found at elevations of up to 8,500 feet in western Colorado (Harrington 1964).

Approximately 66 percent (714 acres) of the selected land near the Hawxhurst Ranch is categorized as pinyon-juniper on steep ground; nearly all of the remaining 34 percent (370 acres) is mountain shrub on steep ground. Along Hawxhurst Creek, in the northwestern-most corner of the central parcel, approximately 0.4 percent (5 acres) of the selected land is characterized as mountain shrub occurring on benches, mesas, and ridgetops; an additional 0.1 percent (1 acre) is mapped as riparian with cottonwoods and boxelders.

Information regarding soils for the selected lands was obtained from the Douglas Plateau Soil Survey (U.S. Soil Conservation Service [SCS], unpublished). Dominant soil map units on the selected lands include: map unit 74 - Torriorthents, cool-Rock Outcrop, 35 to 90 percent slopes; map unit 41 - Borollic Calciorthids, 25 to 50 percent slopes; map unit 8 - Rock Outcrop-Torriorthents, 15 to 90 percent slopes, and map unit 45 - Empedrado loam, 25 to 45 percent slopes. Two very small areas along the southern boundary of the BLM parcels immediately adjacent to the Hawxhurst ranch contain map unit 42 - Fughes clay loam, 2 to 6 percent slopes and map unit 43F - Clapper very stony loam, 25 to 65 percent slopes. The Fughes and Clapper soils will not be described because they occupy only a couple of acres at best.

Torriorthents, in complex with Rock Outcrop (map unit 74), is 50 percent Torriorthents and 40 percent Rock Outcrop. Torriorthents commonly are very shallow to deep over soft or hard bedrock. These soils are well drained and formed in residuum and colluvium derived from sandstone, shale, limestone, or siltstone. No single profile is typical of Torriorthents, but one commonly observed has a surface of pale brown channery loam 2 inches thick. The underlying material is very channery loam 11 inches thick. Sandstone is at a depth of 13 inches. Depth to shale or sandstone ranges from 4 to 60 inches. The soils are calcareous throughout. Available water capacity is very low to moderate. Runoff is very rapid, and the hazard of water erosion is very high. Rock Outcrop consists of barren escarpments, ridge caps, and rocky points of sandstone, shale, limestone or siltstone. Most areas of this map unit are used for wildlife habitat and limited livestock grazing. Some pinyon pine and Utah juniper may occur at upper elevations and have limited economic value. Some are used as firewood, fence posts, and Christmas trees; however, in most areas steepness of slope limits access for harvesting wood products. This map unit is used extensively as winter range and cover for mule deer and elk because it is mainly on south-facing slopes, which are accessible in winter. The potential production of the native vegetation in normal years is about 650 pounds of air-dry vegetation per acre.

Borollic Calciorthids (map unit 41) are moderately deep to deep, well drained soils on sideslopes and toe slopes. They have formed in colluvium derived dominantly from mixed sedimentary rocks. The native vegetation is mainly brush with scattered pinyon pine and juniper. This map unit is on south, southeast, and southwest exposures. Typically, the surface layer is dark grayish brown loam about 4 inches thick. The upper 7 inches of the subsoil is dark brown clay loam. the lower subsoil to a depth of 30 to 60 inches or more is very pale brown silt loam. Available water capacity is moderate. Runoff is rapid, and the hazard of water erosion is very high. It has excess lime and erodes easily. This unit is used for wildlife habitat and livestock grazing. This unit is too steep to allow application of any mechanical conservation practices. Potential production is about 1,100 pounds per acre.

Rock Outcrop-Torriorthents (map unit 8) is located on south-facing slopes and is very rough with eroded areas. It supports little vegetation with only a few trees, shrubs, forbs, and grass. The unit is 65 percent Rock Outcrop and 30 percent Torriorthents. A soil profile for Torriorthents, as well as the nature of Rock Outcrop, has been previously described in map unit 74. Runoff is very rapid, and the hazard of water erosion also is very high. Livestock grazing is impractical because of the sparseness of vegetation, steepness of slope, and poor access. Potential production is about 350 pounds per acre.

Empedrado loam (map unit 45) occupies areas in and adjacent to small, intermittent drainages tributary to Grassy Gulch. Empedrado loam is a deep, well drained soil formed in colluvium



derived dominantly from mixed sedimentary rocks. the native vegetation is mainly shrubs and grasses. Typically, the surface layer is dark grayish brown loam 10 inches thick. The upper subsoil is yellowish brown clay loam 11 inches thick. The next 7 inches is light olive brown gravelly sandy clay loam. The lower part to a depth of 60 inches or more is yellowish brown loam. Available water capacity is high. Runoff is rapid, and the hazard of water erosion is very high. This unit is used for livestock grazing and wildlife habitat. The potential plant community on this unit is mainly Gambel oak, Saskatoon serviceberry, mountainbrome, nodding brome, elk sedge, and mountain snowberry. If range condition declines due to overgrazing, shrubs forbs, and Kentucky bluegrass increase or invade the site. The potential production is about 2,000 pounds per acre.

In summary, the BLM land under the Proposed Action has approximately 4 percent in potential production of 2,000 pounds per acre, 30 percent at 1,100 pounds per acre, 36 percent at 650 pounds per acre, and 30 percent at 350 pounds per acre. Under the Grassy Gulch and 160-Acre Alternatives, the percentages change to 2 percent at 2,000 pounds per acre, 32 percent at 1,100 pounds per acre, 38 percent at 650 pounds per acre, and 28 percent at 350 pounds per acre.

3.14.2 Offered Lands (Private to BLM)

Vegetation on the Horsethief Ranch consists of the saltbush-greasewood vegetation type (Atriplex-Sarcobatus) (Kuchler 1975; Harrington 1964). Approximately 78 percent (495 acres) of the offered land is categorized as saltbush with evident annual or perennial understory, 12 percent (77 acres) is pinyon-juniper on steep ground, and 10 percent (62 acres) is riparian with cottonwoods and tamarisk. The 62 acres of riparian areas include floodplains. Seeded crested wheatgrass and Russian wild rye occur north of the riparian habitat and west of the existing gravel road, which runs to the Colorado River. Some intermediate wheatgrass, alkali sacaton, and dropseed also occur there. The upland grassy area consists of galleta grasses and scattered shrubs (four-wing saltbush, shadscale, spiny hopsage). Mesic pockets have skunkbrush (Rhus trilobata) and there are scattered, single-leaf ash trees.

The Horsethief property contains five soil map units: Badland (map unit Ba); Rock Land (map unit Ro); Rock Outcrop (map unit Rp); Dwyer loamy sand, 3 to 12 percent slopes (map unit Dwc); and Blackston stony loam, 3 to 25 percent slopes (map unit Btd).

Rock Land occupies a narrow band immediately north of the Colorado River. It contains a very shallow soil that is less than 2 inches deep over bedrock. It is strewn with stones and sandstone boulders. This mapping unit is used mainly as watershed and wildlife areas and for scenic and recreation uses. Potential production is approximately 350 pounds per acre.

Dwyer loamy sand occupies an area upslope from Rock land on the west side of the Horsethief property. The Dwyer soil is a deep, excessively drained soil formed in aeolian sands on mesas and benches. The surface layer is a pinkish-gray loamy sand about 4 inches thick. The underlying layers are reddish-brown loamy fine sand that extend to a depth of 60 inches or more. Dwyer soils have very rapid permeability and a low or moderate available water capacity. The hazard of soil blowing is high, and the hazard of water erosion is slight. These soils are used for grazing, wildlife habitat, and for watershed. Potential production is about 700 pounds per acre.

A very narrow Rock Outcrop cliff extends across the area from west to east, and is within the Horsethief property near the Section 7 - Section 8 boundary and again across the middle of Sections 8 and 9. The very steep cliff is Entrada Sandstone. Potential production is negligible.

North of the sandstone cliff in the northeast corner of the property is an area of Badland (map unit Ba). This is a rough and broken area of very steep, nearly barren hills and ridges separated by steep-walled, deeply entrenched gullies and canyons. Badland consists of gypsiferous shale that contains layers of sandstone outcrop along canyon walls. It products a large amount of sediment. Badland is used mainly as refuge areas for wildlife and as scenic areas. Potential production also is low in this site, possibly 400 pounds per acre.

South of the sandstone cliff on the east side of the property is Blackston stony loam. This soil is gently sloping to steep and is on high terraces and benches. The surface layer is pinkish-gray stony loam about 5 inches thick. The underlying layers are pinkish-white gravelly loam and very gravelly loam. These extend to a depth of about 28 inches. Below these layers are sand, gravel, and cobblestones that extend to a depth of 60 inches or more. Blackston soils have moderate permeability above a depth of 28 inches and rapid permeability below that depth. Runoff is moderate to rapid, and the erosion hazard is moderate. This soil is used mostly for grazing and as a source of gravel. Potential production is 800 pounds per acre.

Approximately 25 percent of the Horsethief Ranch has potential production of 2,000 pounds per acre, 37 percent at 700 pounds per acre, and the remaining 38 percent at 400 or fewer pounds per acre.

Three map units are present in the Grassy Gulch parcel: map unit 41 - Borollic Calciorthids, 25 to 50 percent slopes; map unit 45 - Empedrado loam, 25 to 45 percent slopes; and map unit 49 - Hesperus-Pagoda complex, 3 to 12 percent slopes. Soils of both map unit 41 and 45 have been previously described.



The Hesperus-Pagoda soils complex (map unit 49) occupies gently sloping toeslopes and terraces. The native vegetation is mainly shrubs, grasses, and forbs. This unit is used for irrigated hay and pasture (where present) and livestock grazing. The average annual production of air-dry vegetation is about 2,000 pounds per acre. This unit is 45 percent Hesperus and 40 percent Pagoda.

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The Hesperus soil is deep and well drained. It formed in residuum and colluvium derived dominantly from shale and sandstone. Typically, the surface layer is very dark gray loam about 7 inches thick. The upper 17 inches of the subsoil is brown clay loam. The lower 13 inches is dark yellowish brown clay loam. The substratum to a depth of 60 inches or more is brown clay loam. Available water capacity is high. Runoff is medium, and the hazard of water erosion is slight to moderate. Potential production is approximately 2,000 pounds per acre.

The Pagoda soil is deep and well drained. It also formed in residuum and colluvium derived dominantly from shale and sandstone. Typically, the surface layer is dark grayish brown clay loam about 6 inches thick. The upper 11 inches of subsoil is brown clay loam about 6 inches thick. The lower subsoil is brown clay loam to clay to a depth of 60 inches or more. Available water capacity is high. Runoff is medium, and the water erosion hazard is slight to moderate. Potential production is approximately 2,000 pounds per acre.

Approximately 76 percent of the Grassy Gulch parcel has potential production of 2,000 pounds per acre and 24 percent at 1,100 pounds per acre.

Three map units are contained within the Hawxhurst 160-acre parcel: Torriorthents, cool - Rock Outcrop, 35 to 90 percent slopes (map unit 74); Borollic Calciorthids, 25 to 50 percent slopes (map unit 41); and Hesperus-Empedrado, moist-Pagoda complex, 5 to 35 percent slopes. Soils within map units 74 (Torriorthents) and 41 (Borollic Calciorthids) have been previously described.

The Hesperus-Empedrado, moist-Pagoda complex (map unit 61) has been mapped for areas in and adjacent to intermittent tributary drainages to Hawxhurst Creek in the 160-acre parcel. This map unit is 35 percent Hesperus loam, 30 percent Empedrado loam, and 20 percent Pagoda clay loam. The Hesperus soil is on steeper mountainsides, the Empedrado soil is on benches and in the less sloping areas, and the Pagoda soil is on benches and mountaintops. Based on the sideslope-drainage position of map unit 61 in the 160-acre parcel, it is apparent that the Empedrado soil is present and not the Hesperus or Pagoda soils. The Empedrado soil has been previously described.

Approximately 78 percent of the 160-acre parcel has potential production of 2,000 pounds per acre, 8 percent at 1,100 pounds per acre, and 14 percent at 650 pounds per acre.

3.15 Wildlife and Wildlife Habitat

3.15.1 Selected Lands (BLM to Private)

The selected property is located in the Collbran Habitat Management Plan (HMP) area where the key species managed are elk and mule deer (U.S. Forest Service [USFS] and BLM 1991). According to Colorado Division of Wildlife (CDOW) maps (CDOW 1992), approximately 61 percent (665 acres) of the selected land is elk winter range (Figure 3-1). Winter range is that part of the home range where 90 percent of the individuals are located during a site-specific period of winter during the average 5 winters out of 10. The amount of winter range is the limiting factor restricting the size of both elk and mule deer populations in this part of the state (USFS and BLM 1991; Schnurr 1991). Elk typically winter on south-facing slopes in pinyon-juniper habitat; those on public land generally move to private land after the first day of hunting season. It is possible, however, to find elk on any portion of the Hawxhurst Ranch at any time of the year. According to the CDOW, during the period 1988-1992, winter "classification" counts were made in the area between Brush Creek and Kimball Creek. The average number of elk counted was 175. However, the CDOW has determined that these "classifications" account for about 2/3 of the animals actually present in the area (Ellenberger 1992).

Deer migrate through the Hawxhurst Ranch area in late September to October to reach the winter range, which occurs at lower elevations to the southwest (CDOW 1992) (Figure 3-2). Although designated mule deer winter range does not occur on the selected lands, many winter on the most exposed south-facing pinyon-juniper covered slopes of the selected lands. Deer move back through in April or May on their way to their summer range at higher elevations. Deer are not as likely to move to private land during the hunting season as are elk. Mule deer move primarily to avoid deep snow and to areas with abundant forage.

Wild turkeys also occur in the area around the selected lands (Figure 3-3). These birds are likely from a native population to the east and reintroduced birds from many years ago (Miller 1992). According to CDOW maps (CDOW 1992), approximately 10 percent (105 acres) of the land near and including the Hawxhurst Ranch is in a wild turkey production area and approximately 10 percent (113 acres) is turkey winter range (CDOW 1992). Between 120 and 140 wild turkeys winter adjacent to Hawxhurst Creek. These turkeys spread out onto the Hawxhurst Ranch and surrounding areas each spring. Although the turkey population in this area is relatively high, few turkeys are taken by hunters due to limited public access on private land (Hoffman 1992). Turkeys, blue grouse, mourning doves, bear, and mountain lion are other game species hunted in this area, but to a lesser extent than elk and deer. Predators and furbearers expected to occur in the area include coyote, gray fox, badger, striped skunk, bobcat, long-tailed weasels, and

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raccoon (USFS and BLM 1991). Hawxhurst Creek is likely to contain Colorado River cutthroat trout (Oncorhynchus clarki plueriticus) (Sealing 1992).

Other wildlife species characteristic of the pinyon-juniper habitat include the black-throated gray warbler, plain titmouse, ash-throated flycatcher, pinyon mouse, and gray fox. Cooper's hawks may nest in this vegetation type. The mountain shrub is inhabited by Virginia's warbler, orange-crowned warbler, black-headed grosbeak, least chipmunk, and nesting sharp-shinned hawks. A golden eagle nest site was observed recently, north of the western parcel (CDOW 1992) (Figure 3-2).

In 1984, Hawxhurst Ranch granted a Conservation Easement to the CDOW over the entire ranch. Under the Conservation Easement, use of the property is limited to ranching, limited residential use, the preservation of open space, and preservation of wildlife habitat in perpetuity. Specifically prohibited is any subdivision of the property for sale to unrelated third parties for the purpose of constructing residential units not associated with ranching and farming operations. The purpose of the Easement is "to preserve and protect in perpetuity the natural, ecological, wildlife habitat, open space, scenic aesthetic and agricultural features and values of the property."

3.15.2 Offered Lands (Private to BLM)

The Horsethief property provides year-round habitat for mule deer; however, elk are probably only occasional visitors (Lambeth 1992).

The entire Colorado River corridor, a portion of which borders the southern edge of the Horsethief Ranch, is bald eagle winter range. A winter concentration area is located approximately 3 miles upstream from the Horsethief Ranch. Bald eagle roost sites, nest sites, and golden eagle nest sites also are found in the vicinity of the offered lands (CDOW 1992) (Figure 3-4).

Peregrine falcon habitat, including foraging territory, migratory hunting territory, and potential nesting areas, is found on and surrounding the offered lands (CDOW 1992) (Figure 3-5). The closest peregrine eyries to the property are 5 and 6 miles away.

Canada goose winter range encompasses the entire offered parcel, and much of the Horsethief Ranch is also a Canada goose production area (CDOW 1992) (Figure 3-6).

According to CDOW (Hoffman 1992), some turkeys have been observed in the Horsethief area. CDOW hopes to initiate a program to introduce Rio Grande turkeys into the Horsethief Ranch area.



Bighorn sheep activity areas are currently confined to the south bank of the Colorado River (CDOW 1992), across the river corridor from the Horsethief property.

Other mammals considered characteristic of the area include the white-tailed prairie dog, rock squirrel, Ord's kangaroo rat, beaver, muskrat, desert cottontail rabbit, and the Colorado chipmunk (Lambeth 1992).

Characteristic birds of the Horsethief Ranch area are the blue grosbeak, Say's phoebe, lesser goldfinch, canyon wren, rock wren, mourning dove, and Bullock's oriole (Lambeth 1992). Two rare and local neotropical migratory birds, Scott's oride and gray vireo, are likely on the Horsethief property.

Reptiles in the area include the collared lizard, side-blotched lizard, plateau whiptail, and the gopher snake (Lambeth 1992).

As described in Section 3.15.1, key species managed in the Grassy Gulch and 160-acre parcel areas are elk and mule deer (USFS and BLM 1991). Neither parcel is considered elk or mule deer winter range, critical habitat, a production area, or a summer concentration area (CDOW 1992). Both parcels occur in wild turkey habitat; however, neither parcel is considered winter range or a production area (CDOW 1992). Both parcels consist of mountain shrub habitat. Species characteristic of this habitat are described in Section 3.15.1.

3.15.3 Threatened or Endangered Species (Biological Evaluation)

3.15.3.1 Wildlife

Selected Lands (BLM to Private)

The bald eagle (*Haliaeetus leucocephalus*) is Federally listed as an endangered species in 43 of the 48 conterminous states, including Colorado (U.S. Fish and Wildlife Service [USFWS] 1990). Bald eagles also are protected under the Bald Eagle Protection Act of June 8, 1949, as amended, and the Migratory Bird Treaty Act of July 3, 1918, as amended.

In Colorado there are approximately 12 pairs of nesting bald eagles (Craig 1992). Wintering birds generally arrive in the region in October or November and leave for their breeding grounds in March or April. No bald eagle critical habitat has been established. Essential habitat includes nest and roost sites (USFWS 1982).



The Federally endangered bald eagle occurs in Colorado most commonly as a winter resident (USFS and BLM 1991). Although preferred wintering areas are usually near water where eagles feed on fish and waterfowl, these raptors will hunt over upland areas with little or no water if other food sources, such as rabbits or deer carrion, are readily available (USFS and BLM 1991). Wintering bald eagles are considered incidental to the selected lands.

The Federal candidate Category 2 ferruginous hawk is an unusual visitor to the Hawxhurst Ranch area.

Offered Lands (Private to BLM)

There are two bald eagle nest sites approximately 3 miles upstream of the offered lands. A bald eagle roost site lies adjacent to the offered lands. The Colorado River, which lies adjacent to the offered lands, is considered bald eagle winter range (CDOW 1992). Bald eagles have been observed roosting on the island southeast of the offered lands.

The black-footed ferret (*Mustela nigripes*) is Federally listed as an endangered species (USFWS 1990). Prairie dog colonies are key habitat for the black-footed ferret. The historic distribution of the black-footed ferret in North America and in Colorado coincided closely with that of the prairie dog.

With the exception of newly reintroduced black-footed ferrets in the Shirley Basin of Wyoming (September and October 1991), there are no known wild populations of black-footed ferrets (Biggins 1992). During the fall of 1991, the USFWS and Wyoming Game and Fish Department (WGFD) released 49 ferrets (32 males, 17 females) into the wild near Shirley Basin, Wyoming. Surveys conducted during July and August of 1992 indicated that at least two solitary adult males and two adult females (observed with litters of two and four) were known to have survived since their release last fall. Between September 22 and October 22, 1992, 90 additional kits that were born during the 1992 season were released in Shirley Basin. A post-release survey conducted November 9, 10, and 11, 1992 verified 19 animals from the 90 that were previously released (Luce 1992). In addition, other potential release sites have been identified in Wyoming and other western states. No black-footed ferret release sites have been identified anywhere near the offered lands (Biggins 1992). No critical habitat has been established for the black-footed ferret.

Potential black-footed ferret habitat exists on the Horsethief property. A small, white-tailed prairie dog colony, approximately 60 acres in size with an average of 10 to 20 holes/acre, is located on the bench north of the tamarisk on the offered lands. This prairie dog colony is in a previously disturbed area (cropped) that contains mostly annuals and few native perennials.



The American peregrine falcon (*Falcon peregrinus anatum*) is Federally listed as an endangered species (USFWS 1990). The American peregrine occurs in Colorado as a nesting and migrating species. The Arctic peregrine falcon (*F. p. tundrias*) is Federally listed as a threatened species. The Arctic peregrine falcon occurs in Colorado as a rare migrant. No critical habitat has been established for the peregrine falcon.

There are 59 occupied peregrine eyries in Colorado (Craig 1992). There are no known peregrine eyries near the offered lands area (CDOW 1992). Peregrine falcons occur in the area mainly during migration periods. The closest peregrine eyries to the property are 5 and 6 miles away.

Peregrine falcons use the offered lands area and adjacent land as migratory hunting territory. There is potential nesting area west along the Colorado River as well as south and southeast of the offered lands. Peregrine falcons use adjacent lands west and east of the offered lands as foraging territory (CDOW 1992).

The offered lands are bordered by 1.75 miles of the Colorado River. This section of river could support the Colorado squawfish. The Colorado squawfish (Ptychocheilus lucius) has been Federally listed as an endangered species since 1967. It is on the endangered species lists of all Colorado River basin states where it has historically occurred. Once abundant from Wyoming south to Sonora, Mexico, remnant natural populations remain only in the Upper Colorado Basin upstream of Glen Canyon Dam. This includes the Green River Subbasin and its tributaries, and the Yampa and White Rivers. In the mainstem Colorado River, Colorado squawfish occur sporadically upstream from Lake Powell to Palisade, Colorado (USFWS 1991). It also is found in the lower 33 miles of the Gunnison River (Tyus et al. 1982) and the San Juan River as far upstream as Shiprock, New Mexico (Platania 1990). Colorado squawfish young-of-the-year and juveniles prefer shallow backwaters while adults prefer deep areas (Miller et al. 1982). Adults seem to prefer depths of about 2 to 7 feet, velocities of 0 to 0.2 feet per second, and boulder/silt substrates (Valdez et al. 1982). As squawfish mature, they become highly mobile during the spawning period, which occurs in early to late summer. Several suspected spawning sites have been identified in the Colorado River, one of which is located in the 15-mile reach upstream from the Colorado/Gunnison River confluence (Archer et al. 1985). Most recently, two Colorado squawfish were collected in the Dolores River about 1 mile upstream from its confluence with the Colorado River (Rose 1991). The section of the Colorado River adjacent to the Horsethief Ranch is proposed critical habitat for the Colorado squawfish.

Razorback suckers could occur along the 1.75 miles of river that lie adjacent to and south of the offered lands. The razorback sucker (*Xyrauchen texanus*) is currently a Federally listed endangered species. This species also is listed as endangered by the State of Colorado. The razorback sucker is indigenous to the large rivers and tributaries of the Colorado River basin



from Wyoming south to Mexico. Presently, this species exhibits a rather scattered distribution in the Colorado River between Lake Powell, Utah, and Rifle, Colorado (Valdez et al. 1982). The majority of the specimens collected in the upper basin have been from two abandoned gravel pits near Grand Junction. The upstream extent of their distribution in the Colorado River is at two locations near DeBeque and Rifle (Rose 1991). One razorback was collected in 1991 near Rifle in an off-river pond that periodically connects with the Colorado River. The same year, 13 razorbacks were collected in a similar off-river pond in DeBeque (Rose 1991). It is suspected that razorbacks use gravel pits as resting, feeding, and spawning areas. This species prefers areas with minimal flows and sand/silt substrates (Tyus et al. 1982). The spawning period for razorback suckers in the upper basin usually occurs in late May or early June.

Specimens also have been taken in Colorado from the lower, mainstem Colorado and Gunnison Rivers, the lower Yampa River, and the Green River. As recently as 1988, razorback suckers were documented as far upstream in the San Juan River as Bluff, Utah (Platania 1990). The section of the Colorado River adjacent to the Horsethief Ranch is proposed critical habitat for the razorback sucker.

Humpback chubs could occur along the 1.75 miles of river that lie adjacent to and south of the offered lands. The humpback chub (*Gila cypha*) is listed as an endangered species by the USFWS and the State of Colorado. This species historically ranged in the mainstem Colorado River downstream to below the Hoover Dam site (Miller 1955). Current populations are found in three major areas: one in the Little Colorado River of the lower basin and two in the mainstem section of the Upper Colorado River (Black Rocks and Westwater Canyon located about 4 miles above and 7 miles below the Utah-Colorado state line, respectively).

Based on the Black Rocks population, humpback chubs prefer deep pools (about 25 to 65 feet deep), eddies, and upwells near boulders, steep dropoff cliff faces, and sand/gravel bars near boulders (CDOW 1981). Young-of-the-year chubs usually are found in backwaters and quiet pockets of water on rock benches or along steep rock walls (Valdez and Clemmer 1982). Juveniles occur in water up to about 30 feet deep over sand-silt and boulder bedrock substrates (Valdez and Nilson 1982). All ages of humpback chub usually are found in relatively quiet water next to high-velocity flows. Spawning occurs from April to July at water temperatures of about 50 to 62°F. Proposed critical habitat for the humpback chub does not include the Colorado River adjacent to the Horesthief Ranch.

Bonytail chubs could occur along the 1.75 miles of river that lie adjacent to and south of the offered lands. The bonytail chub (*Gila elegans*) was listed as endangered by the USFWS in 1980. This species also is listed as endangered by the State of Colorado. The bonytail chub is currently considered rare in the Upper Colorado River basin with only five collections since



1979. The closest location to the project study area is the collection of one specimen in the Colorado River at Black Rocks in 1984 (Scott 1985). Proposed critical habitat for the bonytail chub does not include the Colorado River adjacent to the Horsethief Ranch.

On the Grassy Gulch and 160-acre parcels, bald eagles will hunt over upland areas if other food sources, such as rabbits or deer carrion, are readily available (USFS and BLM 1991). Wintering bald eagles are considered incidental to these parcels.

3.15.3.2 Plants

Selected Lands (BLM to Private)

One special status Wasatch formation plant could occur on selected properties: Astragalus wetherillii (Wetherill milk vetch), a Federal candidate Category 2 species.

Offered Lands (Private to BLM)

Three special status plants could occur on the offered lands. BLM-sensitive *Cryptantha osterhoutii* (Osterhout's cat's eye) and *Amsonia jonesii* (Jone's amsonia) possibly occur on the Horsethief property. Green River Formation plants may occur on the offered lands in the Grassy Gulch Alternative, particularly the BLM-sensitive *Aquilegia barnebyi* (Barneby's columbine).

3.16 Cultural and Paleontological Resources

3.16.1 Selected Lands (BLM to Private)

An intensive cultural and paleontological resource inventory was conducted by Alpine Archaeological Consultants, Inc. (1991; 1992) to determine whether the proposed land exchange and alternatives would result in the transfer of significant cultural and paleontological resources from public to private ownership. Site file searches revealed that no cultural resources had been previously recorded on the selected lands. The pedestrian survey resulted in the discovery of two cultural resource sites, eight isolated finds, and four fossil localities. The BLM, in consultation with the State Historic Preservation Officer (SHPO), determined that neither the cultural resource sites nor the isolated finds meet the criteria for eligibility to the National Register of Historic Places (NRHP).

The paleontological resources also were considered to be insignificant (Alpine Archaeological Consultants, Inc. 1991).



3.16.2 Offered Lands (Private to BLM)

Surveys for cultural or paleontological resources have not been conducted on lands that would be obtained by BLM through this exchange. Based upon the environment and setting of the Horsethief Ranch, it is possible that prehistoric archaeological sites representing the past 7,000 years and consisting of archaeological deposits under overhangs and on the terraces above the Colorado River may be present.

3.17 Economics

3.17.1 Population

Mesa County population was recorded at 93,145 during the 1990 census count. This reflects a 14 percent increase in population since the preceding census count in 1980 (U.S. Department of Commerce 1991). More than 31 percent of the county population, or 29,034 persons, resides in Grand Junction. The 1991 county population estimate was 96,283 (Colorado Division of Local Government 1992).

The 1990 U.S. census described Collbran, the closest population center to the Hawxhurst property, as a "census designated place," or an area with a specifically identifiable population. The 1990 population of Collbran was 228. The Plateau Valley area population was 1,784.

3.17.2 Economic Environment

Mesa County is one of the busiest and fastest-growing counties in western Colorado. The county seat, Grand Junction, is the largest city in western Colorado. The Grand Junction area serves as the banking, health care services, and retail trade center for a large geographical area in western Colorado and eastern Utah.

Mesa County's economy grew rapidly in the 1970s and early 1980s. This growth was largely attributable to energy-related industries, including coal mining, oil and gas exploration, and attempts at large-scale oil shale processing. Lower energy prices and the economic recession in the early 1980s resulted in severe economic problems in the county. Since that time, economic development programs have succeeded in increasing economic diversity in the community, thereby increasing stability and improving the economic outlook (Mesa County 1988; Spehar 1992). The primary economic sectors in Mesa County are government services; the retail and service sectors; and the finance, insurance, and real estate sector (Colorado Division of Local Government 1992).



Collbran, near the Hawxhurst property, is a small community accessed from Colorado Highways 65 and 330. Growth in this community and the surrounding region is constrained by lack of urban services and distance to regional economic centers. The primary economic activity in the Collbran area includes ranching, agriculture, hunting, and to a lesser extent, other types of dispersed recreation.

Hunting of deer, elk, and other game is a popular activity in Mesa County and particularly in the Collbran area. According to the *Hunting and Fishing Industries Economic Impact Model* prepared by Browne, Bortz & Coddington, Inc. (BBC) for the CDOW, 23,784 big game hunters generated almost \$8 million dollars in direct revenue in Mesa County in 1989 (BBC 1990). Each hunter spent an average of \$335 in Mesa County. The 1992 price for a resident hunting license for deer is \$20 and \$150 for non-residents. For a resident elk tag the cost of a license is \$30 and \$250 for non-residents (Schnurr 1992). These license fees generate income for the CDOW.

During the 1992 hunting season, there were two licensed outfitters on BLM lands between Kimball and Brush Creeks. One claimed no use in this area and the other only hunted mountain lion on BLM lands in the Collbran area. Currently, one outfitter is contracted with the USFS to hunt in the vicinity of the Hawxhurst Ranch (Jacobson 1992). Such a contract is intended to prohibit other guide services from operating in the same area; however, according to USFS representatives, illegal guiding on public lands does occur. The hunting outfitter's contract consists of a geographical area approximately 16,000 acres (3 miles out from an established camp). The outfitter pays 3 percent of gross earnings to the Forest Service as payment for the contract. The current outfitter serves approximately 100 clients during the fall hunting seasons. These clients pay the outfitter from \$1,850 to \$2,400 per person per trip, generating a rough estimated gross annual income between \$185,000 and \$240,000 (Wallace 1992). Using the information from BBC's hunting model, these 100 people would spend another \$36,000 in Mesa County for accommodations, transportation, food, supplies, and entertainment.

In addition to hunting on public lands and with guide services, private landowners can allow people on their lands to hunt or can control access to public lands. According to one landowner, trespass fees, those paid to access private hunting grounds, range from \$50 to \$2,000, depending on services offered (e.g., cabins, camps, food, horses), amount of land available to hunt, and status of elk habitat on the land. As this activity is not regulated separately from hunting on public land, it is not possible to estimate the number of hunters that enter the Collbran area to hunt on private lands. Likewise, it is not possible to estimate income generated by trespass fees. It is assumed that landowners in the area could generate several thousands of dollars in income from this activity.



Trapping also occurs in the area; however, Federal agencies have few mechanisms by which to measure the magnitude of the activity. Therefore, it is not possible to gage the level of income generated by trapping.

Hunting generates sales tax revenue for Mesa County and the town of Collbran. Hunters purchasing supplies pay a 2 percent sales tax in Mesa County, which would have generated \$160,000 in tax revenue from the \$8 million spent by big game hunters in 1989. Purchases in towns or cities with additional sales tax, such as Collbran (2 percent), also would have received sales tax revenue.

Hunting in the Loma area, particularly in the vicinity of the Horsethief Ranch, does not draw great numbers of hunters. There is some waterfowl hunting, but even this is minimal (Leslie 1992) (see Section 3.19, Recreation).

Fishing also is an important economic activity in Mesa County. According to BBC's *Hunting and Fishing Industries Economic Impact Model* (1990), approximately 15,925 anglers spent \$6 million in Mesa County in 1987. That is, each angler spent approximately \$377 that year. Both Mesa County and smaller jurisdictions received sales tax revenue from these expenditures. Mesa County sales tax revenue generated by fishermen in 1987 was approximately \$120,000.

Rafting has become a big industry in the mountainous regions of the United States. According to the *River Use in the State of Colorado* report prepared by the Colorado River Outfitters Association (1992), rafters spent an average of \$65.80 per user day in Colorado during 1992. The project area, particularly near the Horsethief Ranch area, has seen a steady increase in rafting and boating launches. Mountain bicycling on Kokopelli's trail also is very popular and use of the trail is increasing. These activities generate economic activity in many ways. The amount of expenditures generated by these activities has not been estimated for Mesa County. However, persons may pay an outfitter to take them on a boat or raft ride, or on a multi-day tour of Kokopelli's trail. They also will typically purchase equipment, food, transportation, and other services in Mesa County.

3.17.3 Property Values

Property values in Mesa County range from extremely low to extremely high. Property is valued by the County Assessor's Office according to property uses and access to such services as roads, power, water, and sewer. Agricultural and ranching lands are assessed according to state formulas based on income production capabilities. Grazing land is therefore assessed at a low rate reflecting the low income production and undeveloped nature of the property. Assessment



methods are generally considered objective and are for taxing purposes only. County assessed

In 1992, grazing land near the Hawxhurst Ranch was assessed by the county at \$9.52 per acre. Grazing land on the Horsethief Ranch was assessed by the county at \$6.23 per acre (Romero 1992). Again, these values are for taxing purposes only.

Market land appraisals combine the above described objective parameters with subjective parameters, such as aesthetics, neighborhood character, and location. Access and adjacent property use could contribute to or decrease the saleability of a property. Consensus on the value of a specific property may not occur because of these subjective valuation parameters and no two properties are alike in all respects.

3.17.4 Fiscal Conditions

Mesa County receives its operating revenue from several sources, including property taxes, sales tax, special assessments, licenses and permits, inter-governmental transfers, charges, fines, and forfeitures. Property taxes generate the majority of operating revenue.

Total 1991 assessed valuation for Mesa County was \$459,292,414, with approximately \$42 million total taxes due. The mill levy (one mill = \$1 for every \$1,000 of value) varies and depends on the taxing districts with jurisdiction on the subject property. The average rural mill levy lies between 75 and 90 mills (Romero 1992). County property tax revenue is disbursed to the general fund, school districts, special districts, and cities and towns.

Property tax paid on the Horsethief Ranch in 1991 totaled \$933.46 (of that, approximately \$115 is attributable to the land), which is much less than 1 percent of the county tax revenue (Mesa County Treasurer's Office 1992).

In fiscal year 1992, Mesa County received \$677,545 of payments-in-lieu-of-taxes (PILT) from the Federal government. Counties typically receive these inter-governmental transfers according to the acreage of Federal land exempt from property tax located in the county. PILT is figured either on \$0.10 per acre or on \$0.75 per acre less Federal revenues disbursed to the county in the preceding fiscal year. Mesa County, however, has over 1.5 million acres of Federal exempt land. In this case, the Federal PILT ceiling of \$1 million is invoked, and the PILT is figured on \$1 million less Federal revenues disbursed to the county in the preceding fiscal year. Small net changes in Federal exempt acreages, therefore, will have no impact on the PILT received by the county as the PILT ceiling has already been enacted (Howe 1992).



Sales tax is a generator of operational revenue and an important indicator of retail sales in the area. The sales tax charged in Collbran is 2 percent. Figure 3-7 illustrates the 4-year average of sales tax receipts by month generated in Collbran. The figure illustrates that the busiest retail months coincide with the hunting season in the Collbran area.

3.18 Social Characteristics

The social characteristics of the two areas potentially affected by this proposed land exchange or alternatives can be described under the broad categories of rural-agricultural and rural-residential communities. These designations indicate a social framework resulting in a community that is typically closer to or having a more multi-faceted relationship with the land than, for example, an urban area. People in both of the subject areas, generally speaking of Collbran and Loma, use private and public property for their enjoyment as well as livelihood. The dominance of agricultural and ranching economies, along with hunting and fishing recreational activities, tends to create an atmosphere of relaxation and privacy.

Residents in the vicinity of Collbran attach a very high intrinsic value to the natural environment and the ranching and farming way of life. Although economic development is a shared goal, changes to the status quo in areas such as these are often viewed negatively, such as an intrusion. A community survey conducted in the spring of 1990 concluded, among other things, that "residents overwhelmingly indicated that they like Collbran pretty much the way it is" (Colorado Rural Revitalization Project 1990). The residents in Collbran have expressed a desire to have more control over local decisions and stress that public involvement is essential in this control process. Of course, a significant amount of land near Collbran is under Federal jurisdiction. Thus, many residents feel that they do not have control over Federal decisions in their region and, therefore, do not control the future course of their community.

The Horsethief Ranch property and adjacent area has a slightly different social climate. The social atmosphere surrounding the subject property is that of recreation. Persons who frequent the river and trails are typically from regions outside the Grand Valley area and include many out-of-state travelers and recreationists. In addition, several naturalist groups have advocated the unique characteristics of the area to the extent that many supporters of both the area and the land exchange are not residents of the immediate area. These non-local persons also would attach a high intrinsic value to the natural environment, particularly to preservation of that environment.

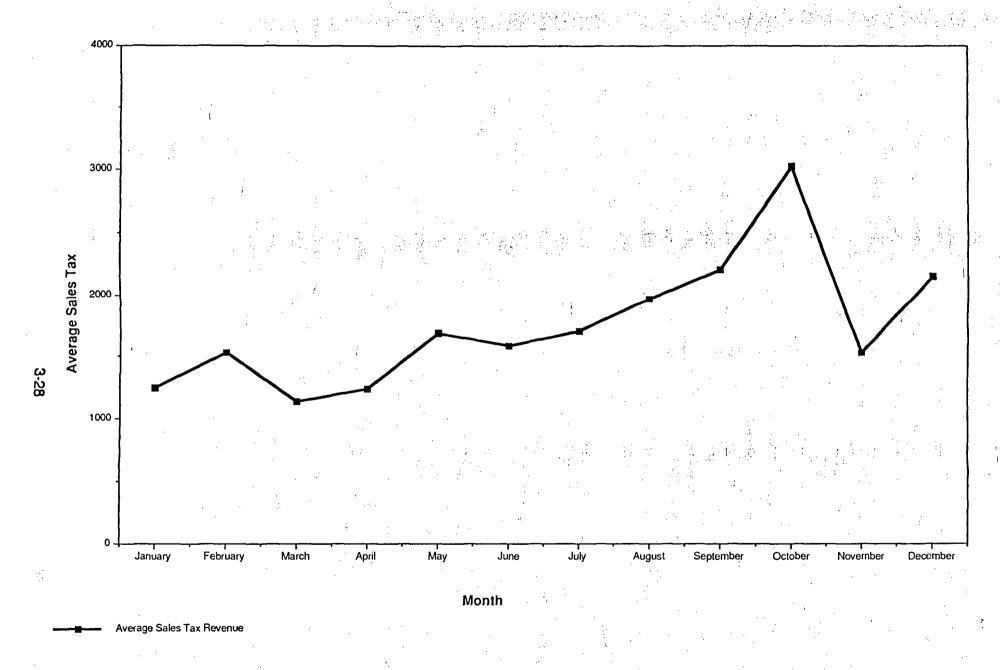


Figure 3-7. Four-Year Average Sales Tax Revenue (1988-1991), Town of Collbran

3.19 Recreation

3.19.1 Selected Lands (BLM to Private)

Existing recreational opportunities on the selected lands are generally season-specific. Hiking and off-highway vehicle (OHV) use are the primary activities during the summer season, while hunting is the primary activity during the fall season. Large numbers of trophy animals are not present on lands proposed for exchange. The age and sex composition of deer and elk in this area is representative of Game Management Units D-12 and E-14, neither of which has a large proportion of trophy animals.

The Hawxhurst Ranch area is contained within Game Management Unit No. 421, which is approximately 346,651 acres in size. In 1991, 887 deer permits and 675 elk permits were sold for Unit 421 (Leslie 1992). Similar numbers of permits will be sold during the 1992 hunting season. The CDOW estimates 3,000 big game hunter user days on Forest Service and BLM lands combined in the Hawxhurst Ranch area. The CDOW estimates 900 big game hunter user days occur on BLM property between Brush and Kimball Creeks, as well as 100 user days of small game hunting. In addition, the CDOW currently stocks fish in Hawxhurst Creek and estimates 100 user days of fishing on this creek (Caskey 1991).

3.19.2 Offered Lands (Private to BLM)

Recreational use of the Horsethief Ranch property is currently discouraged since the area is privately owned. Existing recreational opportunities in the vicinity of the offered lands include boating, fishing, duck and geese hunting, mountain biking, and limited OHV use. The Loma Boat Launch is located approximately 15 miles west of Grand Junction, Colorado, and approximately 1 river mile east of the offered lands. In 1991, approximately 6,000 people registered at the Loma Boat Launch. This represents almost 12,000 annual visitor days of use on the Colorado River originating at this site. The majority of the 6,000 people were there to boat the Loma to Westwater River corridor; however, approximately 250 people indicated that they were there to go fishing via the Rabbit Valley area.

The CDOW estimates a total of 1,275 waterfowl hunter user days and 100 big game hunter user days annually occur through Horsethief and Ruby Canyon via the Loma Boat Launch. This estimate does not include hunters who access the Colorado River below the Loma Boat Launch by vehicle or walking. Angler use is estimated at 4,000 user days per year from the Loma Boat Launch State Wildlife Area (SWA) (Caskey 1991).



Kokopelli's mountain bike trail begins at the parking lot for the Loma Boat Launch. Mary's Loop is a popular day-use section of Kokopelli's trail and is located along the northern boundary of the offered lands. Between May 4, 1992 and September 5, 1992, approximately 2,768 mountain bikers were counted on Mary's Loop. However, this number does not accurately indicate the amount of use the trail receives during the peak mountain biking months, which generally are March through May and October through November. The BLM estimates 4,300 visitor days in 1992 on Lion's and Mary's Loops.

The BLM's recreation management objectives include managing Ruby Canyon as an intensive recreation management area; maintaining semi-primitive recreational opportunities with emphasis on maintenance of the natural setting; and acquiring the Loma launch site or an alternative site for use as a public access point for boating in Ruby Canyon (BLM 1987). The Ruby Canyon-Black Ridge area is one of 22 Special Recreation Management Areas (SRMAs) in Colorado described in the BLM's 1991 publication "Colorado Recreational Opportunities."

3.20 Livestock Grazing

3.20.1 Selected Lands (BLM to Private)

The selected lands in the Hawxhurst area are contained within the Hawxhurst Common Grazing Allotment. According to the BLM Allotment Management Plan (AMP), this allotment contains approximately 4,180 acres with a current active grazing preference of 291 animal unit months (AUMs), or approximately 14.0 acres per AUM. There are 3 permittees using the Hawxhurst Common Allotment.

3.20.2 Offered Lands (Private to BLM)

Horsethief Ranch currently is not officially part of a livestock grazing allotment and the BLM generates no revenue from it. However, the area is not fenced and cattle come down through the western portion of the property to water at the Colorado River. During the winters of 1991 and 1992, Hawxhurst Ranch cattle wintered on the eastern flat.

The Grassy Gulch and 160-acre parcels are currently used by Hawxhurst Ranch for livestock grazing. Using the same stocking rate as the rest of the Hawxhurst Common Allotment, the Grassy Gulch parcel would support 46 AUMs and the 160-acre parcel would support 11 AUMs. These numbers could be low when the potential production of the parcels described in the soils section are factored in (see Section 3.14).

3.21 Access

3.21.1 Selected Lands (BLM to Private)

Existing vehicular access to the selected lands is limited to two private ranch roads controlled by the Hawxhurst Ranch. Public access via these roads is allowed only with the permission of the Hawxhurst Ranch operators. Other private landowners on Smalley Gulch have locks on the gated private road to access their property. Current access to the selected lands is generally accomplished by foot, horseback, or OHVs. OHV use on BLM lands in the Hawxhurst Ranch area is limited to existing roads and trails. There are several trails leading into the area, but the majority of people access the selected lands from the north, through the Grand Mesa National Forest (see Figure 3-8).

3.21.2 Offered Lands (Private to BLM)

Vehicular access to these lands is prohibited; the one access road into the area is kept gated and locked. There is no legal public access to the Horsethief Ranch property since the area is privately owned (see Figure 3-9).

3.22 Visual Resources

3.22.1 Selected Lands (BLM to Private)

The BLM-managed property in the Hawxhurst area has not been identified by the GJRA RMP as an area requiring specific visual resource protection (BLM 1987). The Hawxhurst area is characterized by foothills topography, scrub-covered slopes, with sparse tree cover. The dominant colors are green with some mottled beige and tan. Existing contrasts are largely attributable to roadways and livestock trails. Landscape views are vast, providing a variety of textures due to the varying foreground, middleground, and background viewscapes. Viewer sensitivity is low due to the limited public access, and scenic quality would be considered Class B as features are fairly common to the physiographic region.

3.22.2 Offered Lands (Private to BLM)

The Horsethief Ranch property is adjacent to Visual Resource Management (VRM) Class II (along the Colorado River) and Class III (adjacent to Interstate 70) management areas. The Horsethief Ranch also is within the viewshed of the Black Ridge Canyons WSA, a VRM Class I area. Viewsheds from Class I areas are sensitive areas. The WSA is located to the immediate south



of the Horsethief property and the Colorado River, and one can view extensive portions of the river and Horsethief Ranch from the WSA.

The Horsethief Ranch area is characterized by outstanding panoramic views of the Colorado River canyon. Steep canyon walls, smooth sandstone formations, and lush riverine vegetation create the unique natural landscape variety that is pleasing to the viewer. The typical colors are greens and tans of vegetation, and tans and reds of the sandstone walls and formations. Viewer sensitivity would be considered high due to the recreational user volumes in the area. The scenic quality would be considered Class A, as the area combines the most outstanding characteristics of land form, water, color, and vegetation into a unique visual landscape.

The Grassy Gulch and 160-acre parcels are located adjacent to the BLM-managed property in the Hawxhurst area. The visual characterization of these parcels would be the same as that described for the selected lands in Section 3.22.1.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Introduction

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Chapter 4.0 presents the environmental consequences or impacts of the Proposed Action and alternatives. Impacts are based upon the information provided in Chapter 2.0, the project description, and the resource information presented in Chapter 3.0, the affected environment. The analysis of impacts is based on the premise that all standard operating procedures and other Bureau of Land Management (BLM) requirements will be followed in implementing the Proposed Action or alternatives. Any additional assumptions used in evaluating impacts are included in the text.

4.2 Resources Not Affected by the Proposed Action or Alternatives

The following resources and critical elements of the human environment have been analyzed and would not be affected as a result of the proposed land exchange:

- Air quality
- Noise
- Special Management Areas
- Prime farmland
- Hazardous wastes
- Water quality
- Native American Religious Concerns

4.3 Proposed Action Impacts

The Proposed Action consists of a land exchange between the Hawxhurst Ranch Company (Hawxhurst) and the BLM. Hawxhurst proposes to convey to the United States of America approximately 594 acres along the Colorado River, a parcel commonly known as the Horsethief Ranch, through a combination land exchange and fee sale. Hawxhurst wishes to exchange the Horsethief Ranch lands (offered lands) for approximately 1,090 acres of BLM-administered public land (selected lands) adjacent to the Hawxhurst Ranch near the community of Collbran in Mesa County, Colorado.

4.3.1 Projections or Reasonably Foreseeable Actions

4.3.1.1 Management of Selected Lands if Acquired by Hawxhurst Ranch (BLM to Private)

The selected BLM lands which are transferred to private ownership in the Collbran area would be managed in a manner consistent with the existing Conservation Easement on the rest of the Hawxhurst Ranch.

The new private property line would be delineated by a cleared swath and signed. Any fences that might be added would be constructed in a manner that would not impede wildlife crossings.

Hawxhurst Ranch would take a reduction in Federal animal unit months (AUMs) for livestock equal to the percentage of AUMs associated with the reduction of acreage in the grazing allotment. The use associated with these AUMs would shift to private with the selected land.

4.3.1.2 Management of Offered Lands if Acquired by BLM (Private to BLM)

The offered private lands at Horsethief Ranch would be managed by BLM for dispersed recreation opportunities such as primitive camping, mountain bike riding, hiking, and fishing. Vehicle use would be limited to designated roads and trails, except that the road leading down to the riparian zone along the Colorado River would be closed.

The existing limited livestock grazing could be allowed where it would not conflict with recreation use or harm riparian zones.

4.3.2 Impacts to Floodplains

4.3.2.1 Selected Lands (BLM to Private)

The Proposed Action would not disturb or have any adverse effect on floodplains on the selected lands.

4.3.2.2 Offered Lands (Private to BLM)

The Proposed Action would result in public acquisition of floodplains along the Colorado River.

4.3.3 Impacts to Wetlands/Riparian

4.3.3.1 Selected Lands (BLM to Private)

Transferring 1 acre of riparian vegetation along Hawxhurst Creek to private ownership would be a minimal transfer and would not be an adverse impact, because management of the land under private ownership is not likely to differ from current management with the exception of public access.

4.3.3.2 Offered Lands (Private to BLM)

Transferring 62 acres of riparian vegetation along the Colorado River to the Federal government would result in a net increase of 61 acres of riparian vegetation to the Federal government under the Proposed Action. The riparian zone along the Colorado River would be closed to vehicular traffic and livestock grazing. Addition of this 61 acres (net) would be beneficial for waterfowl and other wildlife management.

4.3.4 Impacts to Wild and Scenic Rivers

4.3.4.1 Selected Lands (BLM to Private)

There are no designated, recommended, or potential wild and scenic rivers on or in the vicinity of the selected lands; therefore, the Proposed Action would have no affect on wild and scenic rivers.

4.3.4.2 Offered Lands (Private to BLM)

The Colorado River adjacent to the Horsethief property has been studied and meets the criteria for "scenic" designation. Acquisition and management of the offered lands by the Federal government would improve the quality of the visitor experience on this section of the river because it would preclude development along the river corridor and help preserve its "scenic" qualities.

4.3.5 Impacts to Wilderness

4.3.5.1 Selected Lands (BLM to Private)

There are no designated, proposed, or recommended wilderness areas in the vicinity of the selected lands; therefore, the Proposed Action would have no affect on wilderness areas.

4.3.5.2 Offered Lands (Private to BLM)

The Black Ridge Canyons Wilderness Study Area (WSA), which is proposed for wilderness designation, is located along the south side of the Colorado River, immediately across the river corridor from the Horsethief Ranch. The view from the Black Ridge Canyons WSA would be maintained by acquisition of the offered lands because potential development of the property into residential sites would be eliminated.

4.3.6 Impacts to Minerals

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4.3.6.1 Selected Lands (BLM to Private)

The coal and oil and gas mineral rights on the selected lands would be retained by the Federal government; therefore, the selected lands would still be open to coal and oil and gas leasing with standard lease terms.

4.3.6.2 Offered Lands (Private to BLM)

The Federal government owns all the mineral estate on the offered lands except for a 40-acre parcel in Section 9, which is privately owned. Under the Proposed Action, these 40 acres of privately owned mineral estate would revert to the Federal government. According to the Grand Junction Resource Area (GJRA) Resource Management Plan (RMP), that portion of the offered lands located within one-quarter mile of the river would be closed to locatable mineral entry and mineral material sales would be under BLM management to protect the recreational setting and visual resources. That portion of the offered lands located within one-half mile of the river is available for oil and gas leasing with a no surface occupancy stipulation to protect the high value recreational and scenic resources associated with the Colorado River corridor.

4.3.7 Impacts to Soils and Vegetation

4.3.7.1 Selected Lands (BLM to Private)

The Proposed Action would have no affect on the two vegetation types (i.e., mountain mahogany-scrub oak and pinyon-juniper woodland) located on the selected lands. According to the GJRA RMP, there is no commercial forest land suitable for management on the selected lands. The vegetation would continue to be managed for wildlife habitat and livestock grazing.

Relating to production potential, BLM lands totalling 1,090 acres with the following potential would leave Federal ownership: 44 acres at 2,000 pounds per acre; 327 acres at 1,100 pounds per acre; 392 acres at 650 pounds per acre; and 327 acres at 350 pounds per acre.

4.3.7.2 Offered Lands (Private to BLM)

The Proposed Action would have no affect on the vegetation types located on the offered lands. According to the GJRA RMP, there is no commercial forest land suitable for management on the offered lands. The vegetation would be managed for dispersed recreation, wildlife habitat, and minimal livestock grazing.

Relating to production potential, the Horsethief Ranch (594 acres) has the following values: 149 acres at 800 pounds per acre; 220 acres at 700 pounds per acre; and 225 acres at 400 or fewer pounds per acre.

4.3.3 Impacts to Wildlife and Wildlife Habitat

4.3.8.1 Selected Lands (BLM to Private)

The Proposed Action would have no adverse effect on wildlife and wildlife habitat on the selected lands. The selected lands would be managed in a manner consistent with the existing Conservation Easement on the rest of the Hawxhurst Ranch which specifically stresses wildlife enhancement. Management consistent with the Conservation Easement on the selected lands may protect wildlife values the same as current management under the BLM. If a fence is



constructed along the property line, it would be constructed to not pose a barrier to wildlife movement or migration.

4.3.8.2 Offered Lands (Private to BLM)

The Proposed Action would have a beneficial effect on the public enjoyment and the management of wildlife and wildlife habitat including, mule deer, bald eagles, peregrine falcons, Canada goose, wild turkeys, and bighorn sheep on and in the vicinity of the offered lands. Acquisition of the Horsethief Ranch by the Federal government would help protect wildlife values in this area the same as current BLM wildlife management policies on other Federal lands in the Ruby Canyon area.

4.3.9 Impacts to Threatened or Endangered Species (Biological Evaluation)

4.3.9.1 Selected Lands (BLM to Private)

Wintering bald eagles are considered incidental to the selected lands and the ferruginous hawk is an unusual visitor to the Hawxhurst Ranch area. There are no other known threatened or endangered wildlife species on or in the vicinity of the selected lands. Two special status plant species could occur on the selected lands. Acquisition of these lands by Hawxhurst would transfer potential habitat for these two plant species to private ownership. However, no ground disturbance or development aside from possible fence construction is associated with the Proposed Action, therefore, no effect to threatened or endangered species would be expected.

4.3.9.2 Offered Lands (Private to BLM)

Acquisition and management of the offered lands, which are bordered by 1.75 miles of the Colorado River, would prevent development or disturbance of these lands which would benefit the protection of habitat for the bald eagle, peregrine falcon, Colorado squawfish, razorback sucker, humpback chub, bonytail chub, BLM-sensitive plant *Cryptantha osterhoutti* (Osterhout's cat's eye), and BLM-sensitive plant *Amsonia jonesii* (Jone's amsonia).

4.3.10 Impacts to Cultural and Paleontological Resources

4.3.10.1 Selected Lands (BLM to Private)

The BLM, in consultation with the State Historic Preservation Officer (SHPO), determined that neither the cultural resource sites nor the isolated finds on the selected lands meet the criteria for eligibility to the National Register of Historic Places (NRHP). The BLM, again in consultation with the SHPO, determined that the Proposed Action would have "no effect" on any listed or eligible historic properties on the selected lands (see SHPO correspondence in Appendix B).

The paleontological resources on the selected lands were considered to be insignificant and the Proposed Action would have no adverse affect on these resources.

4.3.10.2 Offered Lands (Private to BLM)

Although no surveys for cultural or paleontological resources have been conducted on offered lands, any that may exist would become publicly owned. Sites which are on public lands are generally more accessible than those on private lands and vehicular access is the main contributing factor for unauthorized collecting and digging. Therefore, sites may be more likely to be affected if they are transferred to the Federal government, even though better protected by law.

4.3.11 Impacts to Economics

Economic and social concerns were identified as significant issues for analysis in this environmental assessment (EA) during the scoping process. It is unlikely that population, housing, and public infrastructure would be impacted. The following sections describe those issues which may be measurably affected by the proposed land exchange.

4.3.11.1 Economic Activity

The lands included in the Proposed Action are undeveloped and are primarily primitive areas which have been traditionally used for economic gain by hunting outfitters and ranchers. The areas also are used by recreationists particularly in the vicinity of the Horsethief Ranch.

This land exchange would have an impact on the Collbran area economy if hunters would leave the area for other hunting grounds. The reasons for leaving this area would be based on potential decreases in the percentage of hunting successes which may be associated with the transfer of land from public to private ownership. According to one outfitter, elk would seek out



private land during the fall to avoid disturbance from hunters and to seek more plentiful feeding areas. If this behavior by the elk occurs, it may result in a decrease in the size of the elk herds on public lands, thereby decreasing the probability of a successful hunt. If one hunter chooses to go to another area outside Mesa County due to the land exchange impacts, Mesa County would loose approximately \$377 (assuming a 4 percent inflation rate since the \$335 expenditure figure was generated - see Section 3.17.2) in direct expenditures. Mesa County and Collbran might then each lose \$8 in sales tax revenue. If the hunter used the outfitter's services or paid a trespass fee, that local income, ranging from \$50 to \$2,000, also would be lost.

It is difficult to determine if hunting practices would decrease, however, since much of this would be dependent on the animals behavior, available forage, and the condition of the herd. According to the Colorado Division of Wildlife (CDOW), the current level of hunting licenses sold for game management unit #421, particularly for deer and elk, would be maintained, as CDOW does not anticipate disturbance to the status and condition of, and accessibility to, the herd as a result of the land exchange. Therefore, the local area would not be economically affected, as the number of hunters in the area would not be decreased. The CDOW does not anticipate a change in hunter days in the Collbran area (Leslie 1992); however, exclusion of 1,090 acres from the public domain would decrease public hunting grounds in game management unit #421 by less than 1 percent.

Due to the increased publicity of the area, more people are visiting the Black Ridge Canyons and Ruby Canyon areas each year. BLM projects that acquisition of the Horsethief Ranch would enhance approximately 2,800 visitor days related to undeveloped recreation. The majority of the use of the Horsethief property would be displaced from other sites in the area such as Rabbit Valley, or an enhancement of a current activity (e.g., an easier loop on Kokopelli's trail). Over the long term, having additional land available for recreation activities and consistent management of the Ruby Canyon corridor, people may be encouraged to revisit the area and bring in new users. It is not possible to project what, if any, portion of this increase would be directly attributable to the acquisition of the Horsethief property.

The BLM projects that acquisition of the Horsethief Ranch would enhance recreation use in the area. Increased use of Kokopelli's trail, increased fishing, camping, hunting, and hiking would stimulate economic activity by increasing retail sales for equipment and increasing demand for services (fuel, restaurants, and outfitters). It is not possible to put a value on this impact without an in-depth study as to the origin of recreationists and whether or not the activity represents new participants or persons merely transferring their use from one area in Mesa County to another. It is important to note that rafting and Kokopelli's trail are attracting non-county and non-state residents. Any expenditures by such non-locals represents an economic benefit rather than a transfer.



In summary, impacts to economic activity resulting from the Proposed Action would be closely tied to any changes to the quality of hunting in the Collbran area. The loss of one big game hunter could translate into an approximate \$393 loss to Mesa County and the town of Collbran. As much as an additional \$2,400 in local income could be lost if the hunter hired an outfitter during the season or paid a trespass fee. However, since the CDOW does not anticipate changes in hunting activity, these economic impacts would not be anticipated.

4.3.11.2 Property Values

The value of private property in the area will not be impacted (positively or negatively) as a result of the land exchange. First, the selected BLM lands adjoin Hawxhurst Ranch exclusively with two minor exceptions on the southern end of Smalley Gulch and the easternmost boundary of the exchange in T. 9S., R, 94 W., Section 16, NW1/4. Second, the exchange will not change the use or utility of any private lands in the area. All adjoining private parcels currently enjoying unrestricted access to BLM lands and the National Forest beyond will continue to have this privilege following the exchange. Furthermore, the selected federal lands will be used in conformance with the existing Conservation Easement which ensures that the property will be used for traditional ranching and wildlife habitat in perpetuity. Therefore, the serenity, open space and recreational values of all property in the area will not be harmed. Finally, the BLM lands being analyzed in this EA for disposal have been specifically identified. The balance of the BLM-managed lands in the area will continue to be classified for retention.

4.3.11.3 Fiscal Conditions

Impacts to the fiscal conditions in Mesa County and potentially affected surrounding local communities would consist of changes in property tax and sales tax revenue from the proposed land exchange. Under the Proposed Action, 594 acres of the Horsethief Ranch would be assessed by the county at \$3,700. Using the 1992 mill levy of 88 mills, the Proposed Action would result in a loss of county property tax estimated at \$94 (assessed value x 29% = taxable value x .088 = taxes due). As this land would become tax exempt under Federal ownership, this loss would be offset by the tax revenue generated by the 1,090 acres of selected land in the Hawxhurst area that would be converted to private ownership. It is estimated that this land would be taxed at an assessed value of approximately \$10,494, thereby generating \$240 in tax revenue (utilizing a 79 mill levy). Due to the differing land values, Mesa County would realize a negligible annual net gain in county tax revenue of \$146.

Since no significant change in hunting, rafting, biking, or other recreation activities is expected, no change in sales tax revenue would be expected as a result of the Proposed Action.



4.3.12 Impacts to Social Characteristics

Social impacts are typically impressions or perceptions that can create a response by both individuals and on a community-wide basis. Many times social perceptions are not based on a current tangible reality, but on an anticipated change or proposed change. That is, many times social impacts may be disputable, as techniques for measuring the magnitude of the impact are not available. Tensions caused by perceptions are often intangible, however, they do evoke real emotions and reactions. Different communities and individual persons will have different capabilities to absorb social change, based on many variables. Several of these factors might include years of residency in the subject community, philosophical or lifestyle ideals, recent social trends, and current social condition, among many others. Social impacts, therefore, are described in qualitative terms in this report.

The proposed Hawxhurst land exchange has already impacted the community of Collbran. The first mention of the exchange in 1991, through to the present, has had a detrimental effect on the community's sense of security and control. As is expressed in verbal and written comments received by the BLM, local residents have exhibited increasing anxiety about their future and their ability to influence local decisions. Many residents expressed resentment toward the impact non-local persons can have on land use decisions in their community. This influence is often perceived as a violation of rights as property owners and local residents. The social impacts have resulted in anger and frustration as well as a general uncertainty regarding the future of this area.

Many long-time residents in the area perceive that the Proposed Action would result in a loss of access and in some cases loss of income (particularly with respect to income generated by hunting activity). Several residents have declared that the exchange would be inequitable, given that they (in the Collbran area) would suffer for giving up hunting lands for the sake of people in another geographical area (Grand Junction) who are interested in the Colorado River corridor. The results of these impacts could be manifested in a lingering distrust of Federal agencies. Since no negative economic impacts are indicated, the negative perceptions may dissipate over time.

Those persons in favor of acquiring the Horsethief Ranch, on the other hand, have expressed excitement and positive anticipation. The riverfront area represents a unique natural ecosystem which many people feel would be an asset to the community of Grand Junction for both preservation and recreation purposes.

4.3.13 Impacts to Recreation

4.3.13.1 Selected Lands (BLM to Private)

Hunting is the primary recreation activity on the selected lands. According to the CDOW, the current level of hunting licenses sold for this area would not be modified as a result of the Proposed Action. The CDOW does not anticipate a change in hunter days in the Collbran area (Leslie 1992). Consequently, the same number of hunters would be restricted to fewer acres of public land. The hunters on BLM land, particularly between Kimball and Brush Creeks, would be more crowded. For example, the CDOW estimates 900 big game hunter user days occur on BLM property between Brush and Kimball Creeks. This area encompasses approximately 6,700 acres. If an equal distribution of hunters throughout the area is assumed, about 150 hunters would be affected. This would result in more crowding, assuming the hunters do not move to other land in the vicinity. An increase in hunting pressure could make it difficult for individual hunters to avoid other hunters and could decrease the success rate, which could negatively affect the quality of hunting for individual hunters. The level of these impacts is so dependent on people's values and perceptions, the magnitude of these impacts could not be quantified.

The impact to the availability of hiking opportunities and off-highway vehicle (OHV) use on the selected lands would be negligible.

4.3.13.2 Offered Lands (Private to BLM)

The BLM's acquisition and management of the Horsethief property would enhance mountain biking for those already using the area and would increase opportunities for novice riders. The BLM projects use on the offered lands in visitor days per year for the following recreation activities: mountain biking (2,000 visitor days); fishing (500 visitor days); primitive camping, no facilities (100 visitor days); waterfowl hunting (50 to 100 visitor days); hiking, picnicking, and sightseeing (100 visitor days); and big game hunting (negligible). These uses would be displaced from other sites in the general area and would not necessarily represent "new" recreationists.

The projected 50 to 100 visitor days of waterfowl hunting represents approximately 4 to 8 percent of the total number of waterfowl hunter user days estimated to occur annually through the Horsethief and Ruby Canyon area. The projected 500 visitor days of fishing represent approximately 13 percent of the estimated annual angler use from the Loma Boat Launch State Wildlife Area (SWA). Further, the projected 2,000 visitor days for mountain biking represent



nearly 50 percent of the number of mountain bikers estimated on Mary's and Lion's Loops in 1992.

Transferring 594 acres of mule deer habitat to the BLM would increase the amount of habitat available for public hunting in this area. However, given that only 100 big game hunter user days have been estimated by the CDOW in the entire Horsethief-Ruby Canyon area (accessing the area from the Colorado River), and that this is not considered good elk habitat, the acquisition of this mule deer habitat would be of negligible benefit to big game hunters.

The BLM currently has no plans for improving the access road or building a new boat launch at this site. The BLM would gate the existing road at the top of the bluff above the river, and only foot, mountain bike, and horseback access would be allowed in the riparian zone. Finally, acquisition and management of the offered lands would be consistent with the BLM's recreation management objectives for this area.

4.3.14 Impacts to Livestock Grazing

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4.3.14.1 Selected Lands (BLM to Private)

The Proposed Action would permanently remove approximately 26 percent, or 76 AUMs from the approved total AUMs on the Hawxhurst Common Allotment. According to the BLM allotment plan, three permittees (including the proponent) use the Hawxhurst Common Allotment. Hawxhurst Ranch has agreed to take the total reduction in AUMs. Their percent of Federal range will be reduced accordingly and neither of the other permittees will take a reduction in grazing privileges.

4.3.14.2 Offered Lands (Private to BLM)

Currently adjacent livestock are not fenced out of the Horsethief Ranch. If the BLM were to acquire this ranch, no additional grazing would be permitted and existing grazing of the riparian area would be controlled.

4.3.15 Impacts to Access

4.3.15.1 Selected Lands (BLM to Private)

Existing access conditions and patterns in the Collbran area would remain the same as the current situation. Vehicular access would still be controlled by the Hawxhurst Ranch along the two private ranch roads. Following the exchange, the selected Federal lands would no longer be accessible to the public. The remaining area would still be accessible by foot and horseback (and off-highway vehicles [OHV] in certain areas) via the existing trails in the area.

4.3.15.2 Offered Lands (Private to BLM)

Access to the Horsethief property would be open except that vehicles would not be allowed in the riparian areas and nearby associated upland habitat.

4.3.16 Impacts to Visual Resources

4.3.16.1 Selected Lands (BLM to Private)

The visual resources on the selected lands would not be adversely effected because any man-made modifications to the environment would be minimal (i.e., a cleared swath along the property line and possibly a fence). In addition, viewer sensitivity in this area is low due to the limited public access to the selected lands.

4.3.16.2 Offered Lands (Private to BLM)

If the BLM acquires the Horsethief Ranch, current Visual Resource Management (VRM) policies on adjacent BLM lands would likely be extended to the offered lands, and would largely be managed as a Class II area which allows minimal change to the existing landscape. The acquisition and management of the offered lands by the Federal government would be consistent with the VRM objectives of this class, which is to retain the existing character of the landscape, and would ensure the visual preservation of the Colorado River corridor and the viewshed of the Black Ridge Canyons WSA.

4.3.17 RMP Conformance

The lands selected by the proponent in the proposed land exchange were not identified for disposal in the GJRA RMP. If the decision is made to complete an exchange, the RMP would be amended to dispose of the selected lands in accordance with Federal regulations. This EA serves as the analysis for the potential plan amendment and as a Biological Evaluation for the U.S. Fish and Wildlife Service (USFWS) relating to Threatened and Endangered Species.

4.4 Grassy Gulch Alternative Impacts (Preferred Alternative)

The Grassy Gulch Alternative of the land exchange would be the same as the Proposed Action except it also would involve the Hawxhurst Ranch's 640-acre parcel known as the Grassy Gulch parcel, located approximately 2 miles northeast of the ranch headquarters. This parcel would be offered to the BLM in addition to the Horsethief Ranch property. These lands would be offered in exchange for an additional 160 acres adjacent to the main body of the Hawxhurst Ranch. The 80 acre parcel of public land surrounded by the Grassy Gulch parcel on three sides would no longer be selected. Under this alternative, the BLM would acquire 1,240 acres from Hawxhurst. In exchange, Hawxhurst would receive 1,170 acres of Federal land.

4.4.1 Projections or Reasonably Foreseeable Actions

4.4.1.1 Management of Selected Lands if Acquired by Hawxhurst Ranch (BLM to Private)

Same as the Proposed Action (see Section 4.3.1.1).

4.4.1.2 Management of Offered Lands if Acquired by BLM (Private to BLM)

Same as the Proposed Action on the Horsethief property (see Section 4.3.1.2).

The Grassy Gulch parcel would be managed with primary consideration to wildlife habitat protection. The current noxious weed problem would be treated. Grazing would be managed in conjunction with use on the Hawxhurst Common Allotment. AUMs would be initially allocated on this parcel at the same stocking rate as the rest of the allotment. The entire Hawxhurst Common Allotment will be reanalyzed to determine the best grazing system to implement in conjunction with the changes occurring on the adjacent Forest Service allotment.



Hiking and horseback access would be available on the ridge trail coming south from the National Forest. Vehicular access would be limited to designated roads and trails. Any additional access development such as connecting the trails in the Grassy Gulch parcel to the Brush Creek road across BLM land, would be decided at a later date with input from all interested parties.

4.4.2 Summary Comparison of Impacts Between the Grassy Gulch Alternative and the Proposed Action

Impacts to the following resources and critical elements of the human environment, on both the selected (BLM to Private) and offered (Private to BLM) lands, under the Grassy Gulch Alternative would be the same as the impacts described for the Proposed Action:

- Floodplains (see Section 4.3.2)
- Wetlands/Riparian (see Section 4.3.3)
- Wild and scenic Rivers (see Section 4.3.4)
- Wilderness (see Section 4.3.5)
- Minerals (see Section 4.3.6)
- Cultural and Paleontological Resources (see Section 4.3.10)
- Visual Resources (see Section 4.3.16)
- RMP Conformance (see Section 4.3.17)

4.4.3 Impacts to Soils and Vegetation

4.4.3.1 Selected Lands (BLM to Private)

Same as the Proposed Action (see Section 4.3.7.1), except the potential production acreages change to the following: 23 acres at 2,000 pounds per acre; 374 acres at 1,100 pounds per acre; 445 acres at 650 pounds per acre; and 328 acres at 350 pounds per acre.

4.4.3.2 Offered Lands (Private to BLM)

Same as the Proposed Action (see Section 4.3.7.2), except the cleared rangeland around an impoundment on the Grassy Gulch parcel contains a large population of Hound's tongue, a forb associated with highly disturbed sites. A thistle infestation is located near the center of the parcel. The production potential of the Grassy Gulch parcel is as follows: 486 acres at 2,000 pounds per acre and 154 acres at 1,100 pounds per acre.

4.4.4 Impacts to Wildlife and Wildlife Habitat

4.4.4.1 Selected Lands (BLM to Private)

Same as the Proposed Action (see Section 4.3.8.1).

4.4.4.2 Offered Lands (Private to BLM)

Same as the Proposed Action (see Section 4.3.8.2), except the Grassy Gulch parcel would be managed with wildlife as a priority. Blocking BLM land adjacent to the National Forest would make habitat enhancement work more likely to benefit public resources.

4.4.5 Impacts to Threatened and Endangered Species (Biological Evaluation)

4.4.5.1 Selected Lands (BLM to Private)

Same as the Proposed Action (see Section 4.3.9.1).

4.4.5.2 Offered Lands (Private to BLM)

Same as the Proposed Action (see Section 4.3.9.2), except an additional special status plant species, *Aquilegia barnebyi* (Barneby's columbine), could occur on the Grassy Gulch parcel. Acquisition and management of this parcel by the BLM would provide additional protection to this habitat.

4.4.6 Impacts to Economics

The impacts to economic activity resulting from the Grassy Gulch Alternative would be the same as those described for the Proposed Action (see Section 4.3.11), except approximately \$230 of property tax revenue would be lost as private land enters into Federal ownership. This would be offset by the \$251 in tax revenue generated by the land transferred into private ownership for a net increase in county tax revenue of \$21.

4.4.7 Impacts to Social Characteristics

The social impacts of the Grassy Gulch Alternative would be similar to the Proposed Action (see Section 4.3.12), except fewer people in the Collbran area would perceive negative social impacts as several who oppose the Proposed Action have expressed approval of this alternative.

4.4.8 Impacts to Recreation

4.4.8.1 Selected Lands (BLM to Private)

Same as the Proposed Action (see Section 4.3.13.1), except an additional 160 acres of public land would be transferred to private ownership and would not be available to the public for hunting or other recreation activities. This could make the immediate area even more crowded and result in a less desirable or satisfying hunting/recreation experience. However, this would be somewhat offset by acquisition and management of the Grassy Gulch parcel by the BLM.

4.4.8.2 Offered Lands (Private to BLM)

Same as the Proposed Action (see Section 4.3.13.2), except an additional 640 acres of currently private land in Grassy Gulch would be opened to public hunting, hiking, and OHV use. Acquisition and management of the Grassy Gulch parcel by the BLM would provide additional public access to the area and could result in better dispersement of hunters and other recreationists. The public land pattern in the area would have a more single-unit block appearance, making it more attractive to visit and easier to manage.

4.4.9 Impacts to Livestock Grazing

4.4.9.1 Selected Lands (BLM to Private)

Same as the Proposed Action (see Section 4.3.13.1), except an additional 160 acres of public land within the Hawxhurst Common Allotment would be transferred to private ownership, though 80 acres of BLM land surrounded on three sides would no longer be selected land, resulting in a net increase of 80 acres being selected. Using the same stocking rate as the rest of the allotment (e.g., 14 acres per AUM), the Grassy Gulch Alternative would result in an additional decrease of approximately 6 AUMs on the Hawxhurst Common Allotment. However, this reduction in AUMs would be somewhat offset by the acquisition of the Grassy Gulch parcel by the BLM.

4.4.9.2 Offered Lands (Private to BLM)

Same as the Proposed Action (see Section 4.3.13.2), except an additional 640 acres of private land would be transferred to the Federal government and livestock grazing AUMs would be initially allocated on this parcel at the same stocking rate as the rest of the Hawxhurst Common Allotment. This would result in an additional 46 AUMs, or 40 more than the Proposed Action on

the Hawxhurst Common Allotment. The Allotment Management Plan (AMP) will be updated to include this parcel and stocking rates will be determined at that time.

4.4.10 Impacts to Access

4.4.10.1 Selected Lands (BLM to Private)

Same as the Proposed Action (see Section 4.3.14.1).

4.4.10.2 Offered Lands (Private to BLM)

Same as the Proposed Action (see Section 4.3.15.2), except additional pedestrian and horse access would be available to the public coming south from the National Forest and connecting into existing trails in the Grassy Gulch parcel. This would provide easier access to the public lands on the Brush Creek side of the area for hunting and other recreation activities.

4.5 160-Acre Alternative Impacts

The 160-Acre Alternative of the land exchange would be the same as the Grassy Gulch Alternative except it also would include a 160-acre parcel of the Hawxhurst Ranch located north of the ranch headquarters. This parcel is currently surrounded by BLM-managed lands. The lands selected by Hawxhurst in exchange for these parcels would be the same as those described for the Grassy Gulch Alternative. Under this alternative, the BLM would acquire 1,400 acres from Hawxhurst. In exchange, Hawxhurst would receive 1,170 acres of Federal land.

4.5.1 Projections or Reasonably Foreseeable Actions

4.5.1.1 Management of Selected Lands if Acquired by Hawxhurst Ranch (BLM to Private)

Same as the Proposed Action (see Section 4.3.1.1).

4.5.1.2 Management of Offered Lands if Acquired by BLM (Private to BLM)

Same as the Proposed Action for the Horsethief property (see Section 4.3.1.2), and same as the Grassy Gulch Alternative for the Grassy Gulch parcel (see Section 4.4.1.2).

The 160-acre parcel will be managed for grazing, weed control, and access in the same manner described under the Grassy Gulch Alternative. The two roads through the parcel would be "designated" for OHV purposes.

4.5.2 Summary Comparison of Impacts Between the 160-Acre Alternative, the Proposed Action, and the Grassy Gulch Alternative

The lands selected by Hawxhurst in exchange for the offered lands (Private to BLM) would be the same as those described for the Grassy Gulch Alternative; consequently, the impacts to selected lands (BLM to Private) under the 160-Acre Alternative would be the same as those described for the Grassy Gulch Alternative (see Section 4.4).

Impacts to the following resources for the offered lands under the 160-Acre Alternative would be the same as those described for the Proposed Action or Grassy Gulch Alternative:

- Floodplains (see Section 4.3.2.2)
- Wild and Scenic Rivers (see Section 4.3.4.2)
- Wilderness (see Section 4.3.5.2)
- Threatened or Endangered Species (Biological Evaluation) (see Section 4.4.5.2)
- Cultural and Paleontological Resources (see Section 4.3.10.2)
- Visual Resources (see Section 4.3.16.2)
- RMP Conformance (see Section 4.3.17)

Impacts to the following resources for the offered lands (Private to BLM) under the 160-Acre Alternative would be the same as those described for the Proposed Action or Grassy Gulch Alternative (see Sections 4.3 and 4.4, respectively), except for any differences created by the addition of the 160-acre parcel:

- Wetlands/Riparian
- Minerals
- Soils and Vegetation
- Wildlife and Wildlife Habitat
- Economics
- Social Characteristics
- Recreation
- Livestock Grazing
- Access

4.5.3 Impacts to Wetlands/Riparian

4.5.3.1 Offered Lands (Private to BLM)

Same as the Proposed Action (see Section 4.3.3.2), except an additional 1 acre of riparian vegetation, for a net increase of 62 acres, would be transferred to the Federal government.

4.5.4 Impacts to Minerals

4.5.4.1 Offered Lands (Private to BLM)

Impacts to minerals would be the same as the Proposed Action (see Section 4.3.6.2), except an additional 160 acres of private coal and oil and gas mineral rights would be transferred to the Federal government and would be open to coal and oil and gas leasing with standard lease terms.

4.5.5 Impacts to Soils and Vegetation

4.5.5.1 Offered Lands (Private to BLM)

Same as the Grassy Gulch Alternative (see Section 4.4.3.2), except that the 160-acre parcel has the following potential production: 125 acres at 2,000 pounds per acre; 13 acres at 1,100 pounds per acre; and 22 acres at 650 pounds per acre.

4.5.6 Impacts to Wildlife and Wildlife Habitat

4.5.6.1 Offered Lands (Private to BLM)

Same as the Grassy Gulch Alternative (see Section 4.4.4.2), except the 160-acre parcel also would be managed with a wildlife priority. An even more cohesive block of public land would be available for enhancement work.

4.5.7 Impacts to Economics

Same as the Proposed Action (see Section 4.3.11), except approximately \$230 of property tax revenue would be lost as private land enters into Federal ownership. This would be offset by the \$269 in tax revenue generated by public land transferred into private ownership for a net increase in county tax revenue of \$39.

4.5.8 Impacts to Social Characteristics

Same as the Grassy Gulch Alternative (see Section 4.4.), except the addition of the 160-acre parcel was identified by some people during the scoping process as representing a more equitable land trade. The scoping process led BLM to develop this alternative. Since inclusion of this option, several of the strongest opponents to the exchange indicated in writing that they would not oppose this alternative.

4.5.9 Impacts to Recreation

4.5.9.1 Offered Lands (Private to BLM)

Same as the Grassy Gulch Alternative (see Section 4.4.6.2), except an additional 160 acres of currently private land would be opened to public hunting, hiking, and OHV use. Acquisition and management of the 160-acre parcel by the BLM would provide additional public access, especially OHV use, to the area and could result in better dispersement of hunters and other recreationists.

4.5.10 Impacts to Livestock Grazing

4.5.10.1 Offered Lands (Private to BLM)

Same as the Grassy Gulch Alternative (see Section 4.4.7.2), except an additional 160 acres of private land, part of which is cleared rangeland, would be transferred to the Federal government and livestock grazing AUMs would be initially allocated on this parcel at the same stocking rate as the rest of the Hawxhurst Common Allotment until the AMP is updated. This would result in an additional 11 AUMs. The BLM also would gain management control of an existing water impoundment on the 160-acre parcel which would provide additional livestock management flexibility and options.

4.5.11 Impacts to Access

4.5.11.1 Offered Lands (Private to BLM)

Same as the Grassy Gulch Alternative (see Section 4.4.8.2), except additional north/south and east/west pedestrian, horse, and OHV access would be available to the public through the 160-acre parcel. This would result in a net increase of accessible public land for hunting or other recreation activities.

4.6 No Action Alternative Impacts (Continuation of Present Management)

4.6.1 Projections or Reasonably Foreseeable Actions

4.6.1.1 Management of Selected Lands if Not Acquired by Hawxhurst Ranch (BLM to Private)

Under this alternative, the selected Federal lands would not be patented and would remain in Federal ownership. Current uses that would continue are grazing, wildlife habitat management, and extensive recreation.

Lands in the Hawxhurst area would be managed according to the GJRA RMP. The RMP defines particular management actions that would be applied under the various emphasis areas across the GJRA. These lands are located in Area CO-2, Emphasis on Oil and Gas.

More specific direction is as follows:

- The area would continue to be available for oil and gas leasing. See wildlife information for seasonal restriction.
- The recent withdrawal for locatable minerals on the selected lands would expire in May 1994.
- Wildlife habitat would continue to be managed primarily for deer and elk. Management focus would continue to be on increasing the percent of big game use on public land in the winter. Wildlife critical winter range would still have seasonal restrictions prohibiting disturbing activities from December 1 to May 1. (This restriction applies to 160 acres of the selected land.) Vegetation treatments would continue to consider maintaining fruit production and untreated strips or patches. Surface disturbance would still be prohibited within 100 feet of perennial streams, except at necessary stream crossings. A sport fishery would be maintained in Hawxhurst Creek.
- The ecological integrity of riparian areas would still be given special attention in the implementation of livestock grazing management plans. The Hawxhurst Common/McCurry Allotments would continue to be managed according to the existing Allotment Management Plan.
- OHV use is limited to existing roads and trails.

4.6.1.2 Management of Offered Lands if Not Acquired by BLM (Private to BLM)

The offered land in the Horsethief area would remain in private ownership and could be subdivided and developed with large lot (35+ acres) residential units. The BLM would continue attempting to purchase river properties along Ruby Canyon with Land and Water Conservation Fund (LWCF) money.

The Grassy Gulch and 160-acre parcels would continue to be managed under terms of the existing Conservation Easement. Grazing would continue on both these parcels. Access through these parcels would remain under private control.

4.6.2 Resources Not Affected by the No Action Alternative

The following resources and critical elements of the human environment have been analyzed and would not be affected as a result of the No Action Alternative (Continuation of Present Management):

- Air quality
- Noise
- Special Management Areas
- Prime farmland
- Hazardous wastes
- Water quality
- Native American Religious Concerns
- Soils and Vegetation

4.6.3 Impacts to Floodplains

4.6.3.1 Selected Lands (BLM to Private)

The No Action Alternative would have no affect on any floodplains on the selected lands.

4.6.3.2 Offered Lands (Private to BLM)

The floodplains along the Colorado River would remain in private ownership.

4.6.4 Impacts to Wetlands/Riparian

4.6.4.1 Selected Lands (BLM to Private)

One acre of riparian vegetation along Hawxhurst Creek would remain in Federal ownership.

4.6.4.2 Offered Lands (Private to BLM)

Over 60 acres of riparian vegetation along the Colorado River and on the 160-acre parcel would remain in private ownership. The potential for a net increase to the Federal government of over 60 acres of riparian vegetation would not be available.

4.6.5 Impacts to Wild and Scenic Rivers

4.6.5.1 Selected Lands (BLM to Private)

There are no designated, recommended, or potential wild and scenic rivers on or in the vicinity of the selected lands; therefore, the No Action Alternative would have no affect on wild and scenic rivers in this area.

4.6.5.2 Offered Lands (Private to BLM)

Development of the Horsethief property could degrade the quality of the visitor experience on this section of the Colorado River.

4.6.6 Impacts to Wilderness

4.6.6.1 Selected Lands (BLM to Private)

There are no designated, proposed, or recommended wilderness areas in the vicinity of the selected lands; therefore, the No Action Alternative would have no affect on wilderness areas.

4.6.6.2 Offered Lands (Private to BLM)

The Horsethief property is immediately across the Colorado River corridor and within the viewshed of the Black Ridge Canyons WSA. Development of the Horsethief property would not effect the suitability of the Black Ridge Canyons WSA, but the view from the WSA could be degraded.

4.6.7 Impacts to Minerals

4.6.7.1 Selected Lands (BLM to Private)

The selected lands would still be open to coal and oil and gas leasing with standard terms. The recent withdrawal for locatable minerals would expire in May 1994.

4.6.7.2 Offered Lands (Private to BLM)

Forty to 200 acres of mineral estate would remain in private ownership and would not be available for oil and gas leasing. The remaining mineral estate is Federally owned and would continue to be available for oil and gas leasing with a no surface occupancy stipulation for any leases along the protected river corridor.

4.6.8 Impacts to Wildlife and Wildlife Habitat

4.6.8.1 Selected Lands (BLM to Private)

The No Action Alternative would have no affect on wildlife and wildlife habitat on the selected lands. Current BLM wildlife management would continue.

4.6.8.2 Offered Lands (Private to BLM)

Development of the Horsethief Ranch would negatively effect the wildlife values and wildlife habitat, including mule deer, bald eagles, peregrine falcons, Canada goose, wild turkeys, and bighorn sheep on and in the vicinity of the property. The Grassy Gulch and 160-acre parcels would continue to be managed under the terms of the existing Conservation Easement.

4.6.9 Impacts to Threatened or Endangered Species (Biological Evaluation)

4.6.9.1 Selected Lands (BLM to Private)

The special plant species which could occur on the selected lands would remain under Federal management and protection. The No Action Alternative would have no effect on threatened or endangered species on the selected lands.



4.6.9.2 Offered Lands (Private to BLM)

Development of the Horsethief property would negatively effect habitat for the bald eagle, peregrine falcon, Colorado squawfish, razorback sucker, humpback chub, bonytail chub, and two BLM-sensitive plant species.

Bald eagles hunt from the cliffs and perhaps from the trees on the Horsethief Ranch. This would be curtailed if the Horsethief property were to be subdivided and developed. Eagles would continue to be in the vicinity, but enforcement of wildlife laws regarding the eagles would be made difficult.

While the highest cliffs of the Horsethief property do not appear optimum, when peregrine falcon populations fill in the range to near capacity (1 eyrie per 4 river miles), and an eyrie site would be expected on or nearby the Horsethief property.

Any water depletion to the Colorado River from development of the property would be considered a potentially negative impact by the USFWS (Schrader 1993).

4.6.10 Impacts to Cultural and Paleontological Resources

4.6.10.1 Selected Lands (BLM to Private)

Cultural and paleontological resources on the selected lands would continue to be managed by the BLM and protected by Federal law. However, sites which are on public lands are generally more accessible than those on private lands.

4.6.10.2 Offered Lands (Private to BLM)

Any cultural or paleontological resources that may exist on the offered lands would remain in private ownership. Access to these lands would remain restricted and the potential for unauthorized collecting and digging would be minimized, even though the resources would not be protected by Federal law. Under state law, human remains and associated artifacts are protected on private lands.

4.6.11 Impacts to Economics

Any economic benefits associated with acquisition of the Horsethief Ranch would not be realized. Development of the Horsethief property for residential purposes could increase local tax revenues; however, such increases could be offset by increased demand for various services. In addition, any economic benefits derived from the increase in access to the BLM and National Forest lands under the Grassy Gulch and 160-Acre Alternatives would not be realized.

4.6.12 Impacts to Social Characteristics

The No Action Alternative would have an impact on social values. Opponents of the exchange, many of whom are residents of the Plateau Valley, would perceive that their input into the public involvement component had been considered in the BLM's land use decision. This would have a positive impact on social values, however, it may not completely quell anxiety on the subject of area land exchanges. On the other hand, persons and communities who were supportive of public acquisition of the Horsethief Ranch would be disappointed.

4.6.13 Impacts to Recreation

4.6.13.1 Selected Lands (BLM to Private)

Current recreation opportunities on the selected lands would not change.

4.6.13.2 Offered Lands (Private to BLM)

Enhanced recreation opportunities and experiences on the Horsethief Ranch and along the Colorado River corridor would not be available. Any potential recreational benefits associated with the Grassy Gulch or 160-Acre Alternatives would not be possible under this alternative.

4.6.14 Impacts to Access

4.6.14.1 Selected Lands (BLM to Private)

Existing access on the selected lands would not change.

4.6.14.2 Offered Lands (Private to BLM)

The potential for additional public access to the Colorado River, via the Horsethief property, would not be available. Any potential increase in public access associated with the Grassy Gulch or 160-Acre Alternatives would not be possible under this alternative.

4.6.15 Impacts to Visual Resources

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4.6.15.1 Selected Lands (BLM to Private)

The No Action Alternative would have no effect on the visual resources on the selected lands.

4.6.15.2 Offered Lands (Private to BLM)

Development of the Horsethief Ranch would adversely impact the natural, undisturbed landscape by introducing man-made forms, creating landscape contrasts, and by distracting viewers from sensitive visual resources. Of particular concern would be views impacted from the Black Ridge Canyons WSA and the Colorado River.

4.6.16 RMP Conformance

The No Action Alternative would be in conformance with the GJRA's RMP designation of the selected lands for retention.

However, the No Action Alternative would not further the RMP's land tenure and recreation planned management actions.

4.7 Comparison of Impacts of the Proposed Action and Alternatives

Table 4-1 provides an opportunity to compare the potential impacts of the Proposed Action and each alternative. The table lists possible impacts, both positive and negative, by resource and critical element as they were covered in Chapters 3.0 and 4.0 of this EA.

4.8 Cumulative Impacts

Cumulative impact is defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such



other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR Part 1508.7).

Principal past actions which must be considered in the evaluation of the cumulative impacts are those that have affected similar resources and for which the effect is still residual in the environment. For example, land exchanges or other land transactions which have resulted in the conversion of private land to public management, and conversely, the conversion of public land to private ownership must be considered in the cumulative impact evaluation. The analysis of potential cumulative impacts associated with the proposed land exchange would need to consider both similar projects and projects with similar impacts (i.e., similar land transactions which have resulted in the conversion of public land to private ownership and vice versa). Since no past, present, or reasonable foreseeable future actions similar to the proposed land exchange have been identified, cumulative impacts are not considered in detail in this EA.

The disposal of the land near Hawxhurst Ranch is not a precedent setting action which will accelerate land exchanges in the Plateau Valley. First, the BLM is only considering an amendment to its RMP to allow disposal of the selected Federal lands and nothing more. Therefore, other lands will be retained in the "retention" classification. Second, each potential land exchange must be evaluated on its own merits. This exchange is certainly not the first and will not be the last considered by the BLM; however, there are no other existing or proposed exchanges being considered by the BLM GJRA whose success or failure hinges on the outcome of the proposed Hawxhurst land exchange.

Further, the BLM acquisition of the Horsethief property will have a positive cumulative impact when viewed in conjunction with the BLM's other acquisitions along the Ruby Canyon corridor with Land and Water Conservation Fund (LWCF) monies as directed and funded by Congress. These acquisitions also support other BLM/public objectives such as protection and enhancement of recreational values in the area. Acquisition of the Horsethief Ranch also would have a cumulative positive effect of preserving the Colorado River corridor in Mesa County when considered in conjunction with the efforts of the Mesa County Riverfront Commission and the Colorado Division of Parks and Recreation.

Resource/Critical Element	Proposed Action	Grassy Gulch Alternative (Preferred Alternative)	160-Acre Alternative	No Action Alternative
Acres (Total)	;			,
Selected Lands ¹	1,090	1,170	1,170	0
Offered Lands ²	594	1,240	1,400	0
Air Quality				
Selected Lands	Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action
Offered Lands	Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action
<u>Noise</u>			}	
Selected Lands	Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action
Offered Lands	Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action
Special Management Areas				
Selected Lands	Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action
Offered Lands	Not affected	Same as the Proposed Action	Same as the Proposed :	Same as the Proposed Action

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

Resource/Critical Elem	ent Proposed Action	Grassy Gulch Alternative (Preferred Alternative)	160-Acre Alternative	No Action Alternative
Native American Religious Concerns				
Selected Lands	Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action
Offered Lands	Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action
Wetlands/Riparian		•		
Selected Lands	Transferring 1 acre of riparian vegetation to private ownership is not expected to have an impact because management is not likely to change	Same as the Proposed Action	Same as the Proposed Action	acre of riparian vegetation along Hawxhurst Creek would remain in Federal ownership
Offered Lands	Acquisition of 61 acres of riparian vegetation along the Colorado River to Federal management would be a beneficial impact, particularly for waterfowl and other wildlife management	Same as the Proposed Action	Same as the Proposed Action, except an additional 1 acre of riparian vegetation, for a net increase of 62 acres, would be transferred to the Federal government	The potential for a net increase to the Federal government of over 60 acres of riparian vegetation would not be available
Wild and Scenic Rivers				
Selected Lands	Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

Table 4-1 (Continued)

Resource/Critical	Element	Proposed Action	Grassy Gulch Alternative (Preferred Alternative)	160-Acre Alternative	No Action Alternative
Offered Lands	; ;	Acquisition and management by the Federal government would improve the quality of the visitor experience on this section of the Colorado River because it would preclude development along the river corridor	Same as the Proposed Action	Same as the Proposed Action	Development of the Horsethief property could degrade the quality of the visitor experience on this section of the Colorado River
Wilderness				•	
Selected Lands		Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action
Offered Lands		The view from the Black Ridge Canyons WSA would be maintained because potential development of the property into residential sites would be eliminated	Same as the Proposed Action	Same as the Proposed Action	No affect except development of the Horsethief property could degrade the view from the WSA
<u>Minerals</u>				. •	
Selected Lands	·	BLM reserves coal and oil and gas mineral rights; lands still open to leasing with standard terms	Same as the Proposed Action	Same as the Proposed Action	BLM lands would still be open to leasing with standard terms; the recent withdrawals for locatable minerals would expire in May 1994

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

Table 4-1 (Continued)

Resource/Critical	Element	Proposed Action	Grassy Gulch Alternative (Preferred Alternative)	160-Acre Alternative	No Action Alternative
Offered Lands		40 acres of privately owned mineral estate along the Colorado River would revert to Federal ownership and management	Same as the Proposed Action	Same as the Proposed Action except an additional 160 acres of private coal and oil and gas mineral rights would be transferred to the Federal government and would be open to leasing with standard terms	40 to 200 acres of mineral estate would remain in private ownership and would not be available for public leasing with BLM's standard lease terms or protection
Vegetation			•		
Selected Lands		Not affected; 714 acres pinyon-juniper, 375 acres mountain shrub, and 1 acre riparian transferred from public to private	Same as the Proposed Action, except an additional 18 acres pinyon-juniper and 62 acres mountain shrub transferred from public to private	Same as the Grassy Gulch Alternative	Not affected
Offered Lands		Not affected; 455 acres saltbush, 77 pinyon-juniper, and 62 acres riparian transferred from private to public	Same as the Proposed Action, except the Grassy Gulch parcel contains a large population of Hound's tongue and a thistle infestation; an additional 640 acres mountain shrub transferred from private to public	Same as the Grassy Gulch Alternative, except an additional 160-acre parcel containing some riparian and mountain shrub plus cleared pastureland would be transferred from private to public	Not affected
Soils					
Selected Lands		Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

Resource/Critical Element	Proposed Action	Grassy Gulch Alternative (Preferred Alternative)	160-Acre Alternative	No Action Alternativ
Offered Lands	Not affected	Same as the Proposed Action	Same as the Proposed Action	Same as the Proposed Action
Net Changes in Potential Vegetative Production (Gain/Loss is in Public Ownership)	Loss of 44 acres at 2,000 lbs/acre	Gain of 463 acres at 2,000 lbs/acre	Gain of 588 acres at 2,000 lbs/acre	No change
	Loss of 327 acres at 1,100 lbs/acre	Loss of 220 acres at 1,100 lbs/acre	Loss of 207 acres at 1,100 lbs/acre	No change
	Gain of 1 acre at 640 lbs/acre	Loss of 57 acres at 650 to 800 lbs/acre	Loss of 30 acres at 650 to 800 lbs/acre	No change
**	Loss of 86 acres at 400 or less lbs/acre	Loss of 87 acres at 400 or less lbs/acre	Loss of 87 acres at 400 or less lbs/acre	No change
Wildlife and Wildlife Habitat				
Selected Lands	No adverse effect on wildlife or habitat due to Conservation Easement, but	Same as the Proposed Action	Same as the Proposed Action	Maintain existing management flexibility
	reduced flexibility for public management; 665 acres elk winter range, 105 acres of wild turkey production area,			
	and 113 acres of turkey winter range transferred from public to private			

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

Table 4-1 (Continued)

Resource/Critical	Element	Proposed Action	Grassy Gulch Alternative (Preferred Alternative)	160-Acre Alternative	No Action Alternative
Offered Lands		1.75 miles of riparian wildlife habitat transferred from private to public, increasing management flexibility along the river	Same as the Proposed Action, except Grassy Gulch parcel would be managed with wildlife as a priority and public management flexibility would also be increased in the Hawxhurst area	Same as the Grassy Gulch Alternative, except the 160-acre parcel would also be managed with a wildlife priority, further increasing flexibility in management	Development of the Horsethief Ranch would negatively effect wildlife values and habitat; the Grassy Gulch and 160-acre parcels would continue to be managed
					under the terms of the existing Conservation Easement
Threatened or Enda Species (Biological Evaluation)	angered		· · · · · · · · · · · · · · · · · · ·		
Selected Lands	. •	No effect would be expected	Same as the Proposed Action	Same as the Grassy Gulch Alternative	No effect
Offered Lands		Acquisition of high use bald eagle winter range, potential black-footed ferret habitat, peregrine falcon migratory hunting territory, and	Same as the Proposed Action, except an additional special status plant species could occur on the Grassy Gulch parcel	Same as the Grassy Guich Alternative	Development of the Horsethief property would negatively effect several special status wildlife and plant species
		1.75 miles of Colorado River frontage. This section of river is proposed critical habitat for the Colorado squawfish and razorback sucker. Two BLM-sensitive plant species potentially occur on the offered lands			

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

	Resource/Critical	Element	Proposed Action	Grassy Gulch Alternative (Preferred Alternative)	160-Acre Alternative	No Action Alternative
•	Cultural and Paleont Resources	ological				
	Selected Lands		No effect	Same as the Proposed Action	Same as the Proposed Action	No known effect; however, sites on public lands are more accessible than those on private lands
*	Offered Lands		No known sites or resources; potential sites may be more likely to be affected if they are transferred to the Federal government, even though better protected by law	Same as the Proposed Action	Same as the Proposed Action	No known effect; access to these lands would remain restricted and the potential for unauthorized collecting and digging would be minimized
	Economic Activity	•				
}	Selected Lands		CDOW does not anticipate changes in hunting activity, therefore no adverse impacts to the local economy would be expected	Same as the Proposed Action	Same as the Proposed Action	Not affected
	Offered Lands		Any potential increase in expenditures by non-local recreationists would represent an economic benefit	Same as the Proposed Action	Same as the Proposed Action	Any potential economic benefits associated with acquisition of the Horsethief property, or the Grassy Gulch and 160-acre parcels would not be realized

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

Resource/Critical Element	Proposed Action	Grassy Gulch Alternative (Preferred Alternative)	160-Acre Alternative	No Action Alternative
Property Values		7	·	
Selected Lands	Not affected	Same as the Proposed Action	Same as the Proposed Action	Not affected
Offered Lands	Not affected	Same as the Proposed Action	Same as the Proposed Action	Not affected
Fiscal Conditions				
Selected Lands	Virtually no impact would be felt	Essentially the same as the Proposed Action	Essentially the same as the Proposed Action	No impact
Offered Lands	Virtually no impact would be felt	Essentially the same as the Proposed Action	Essentially the same as the Proposed Action	No impact
Social Characteristics	Qualitative assessment. Both positive and negative impacts would be perceived	Same as the Proposed Action, except more people in the Collbran area expressed support of this alternative	Same as the Grassy Gulch Alternative, except this alternative appears to some to represent a more equitable trade. Several exchange opponents indicated they would not oppose this alternative	Opponents would perceive that their input had been considered; however, supporters of acquiring the Horsethief property would be disappointed

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

eation ected Lands					No Action Alternative
ected Lands					
		CDOW does not anticipate a change in hunter days in the Collbran area; however, this could result in more crowding and a decrease in the success rate and quality of the hunting experience	Same as the Proposed Action, except an additional 80 acres of public land would not be available for public hunting or other recreation activities; however, this would be offset by acquisition and management of the Grassy Gulch parcel by the BLM (see below)	Same as the Grassy Gulch Alternative	Not affected
ered Lands		BLM projects 2,800 visitor days of use per year on the Horsethief property	Same as the Proposed Action, except an additional 640 acres would be opened to public hunting, hiking, and OHV use	Same as the Grassy Gulch Alternative, except an additional 160 acres would be opened to public hunting, hiking, and OHV use	Potential for 2,800 visitor days of use per year on the Horsethief property would not be available
tock Grazing					
ected Lands		Reduction of 76 AUMs on the Hawxhurst Common Allotment	Same as the Proposed Action, except an additional 6 AUMs would be decreased from the Hawxhurst Common Allotment; this would be offset by acquisition of the Grassy Gulch parcel by the BLM (see below)	Same as the Grassy Gulch Alternative	Not affected
t	ock Grazing	ock Grazing	Collbran area; however, this could result in more crowding and a decrease in the success rate and quality of the hunting experience The succe	Collbran area; however, this could result in more crowding and a decrease in the success rate and quality of the hunting experience Tred Lands BLM projects 2,800 visitor days of use per year on the Horsethief property Beduction of 76 AUMs on the Hawxhurst Common Allotment Reduction of 76 AUMs on the Hawxhurst Common Allotment Reduction of 76 AUMs on the Hawxhurst Common Allotment; this would be offset by acquisition and management of the Grassy Gulch parcel by the BLM (see below) Same as the Proposed Action, except an additional 640 acres would be opened to public hunting, hiking, and OHV use Same as the Proposed Action, except an additional 6 AUMs would be decreased from the Hawxhurst Common Allotment; this would be offset by acquisition of the Grassy Gulch parcel by the BLM	Collbran area; however, this could result in more crowding and a decrease in the success rate and quality of the hunting experience BLM projects 2,800 visitor days of use per year on the Horsethief property BLM projects 2,800 visitor days of use per year on the Horsethief property Cted Lands Reduction of 76 AUMs on the Hawxhurst Common Allotment Reduction of 76 AUMs on the Hawxhurst Common Allotment Collbran area; however, this would be available for public hunting or other recreation activities, however, this would be offset by acquisition and management of the Grassy Gulch parcel by the BLM (see below) Same as the Proposed Action, except an additional 640 acres would be opened to public hunting, hiking, and OHV use Same as the Grassy Gulch Alternative, except an additional for other recreation activities, however, this would be opened to public hunting, hiking, and OHV use Same as the Grassy Gulch Alternative Same as the Grassy Gulch Action, except an additional for other recreation activities, however, this would be decreased acquisition of the Grassy Gulch Alternative Same as the Grassy Gulch be opened to public hunting, hiking, and OHV use

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

Grassy Gulch Alternative

(Preferred Alternative)

No Action Alternative

Ridge Canyons WSA and

the Colorado River

160-Acre Alternative

Resource/Critical Element

Proposed Action

Canyons WSA

¹Selected Lands: BLM to Private.

²Offered Lands: Private to BLM.

5.0 CONSULTATION AND COORDINATION

During preparation of the environmental assessment (EA), the following agencies and private organizations were contacted to obtain data:

Federal

Bureau of Land Management (Grand Junction, Colorado)

U.S. Fish and Wildlife Service

U.S. Forest Service (Lakewood, Colorado)

U.S. Forest Service (Collbran, Colorado).

State

Colorado Department of Health Colorado Division of Wildlife (Grand Junction and Fort Collins, Colorado) Colorado Division of Local Government

County and Local

County Commissioner (Mesa County, Colorado) Mesa County Appraiser Mesa County Treasurer

Private and Other

Mesa Realty
Collbran Chamber of Commerce
W.I.N. Real Estate
Colorado Nature Conservancy
Bill Wallace, Outfitter (Collbran, Colorado)

6.0 LIST OF PREPARERS

6.1 Team Organization

Lead Agency - Bureau of Land Management

Grand Junction Resource Area

6.2 EA Preparers

The environmental assessment (EA) was prepared under a third-party contract arrangement with ENSR Consulting and Engineering of Fort Collins, Colorado. The EA Core Team and Technical Specialists who prepared the document are listed in Table 6-1.

Table 6-1

List of Preparers for the Hawxhurst Land Exchange EA

Name	Education	EA Responsibility
ENSR Core Team		
William Theisen	M.S. Recreation Resources B.S. Natural Resources 11 years experience	Project Manager, Land Use and Access, Recreation, Critical Elements, RMP Conformance, Cumulative Impacts
Christie Reibe	B.S. Wildlife Ecology 8 years experience	Geology and Minerals, Soils and Vegetation, Wildlife and Wildlife Habitat, Threatened and Endangered Species, Cultural and Paleontological Resources
Karin Sable	B.A. Economics 5 years experience	Social Characteristics, Economics, Visual Resources
Technical Assistance	en e	
Scott Patti	B.S. Natural Resources Management/Fisheries Biology 8 years experience	Wildlife, Geology, Soils, Water Quality, Technical Editing
Jim Nyenhuis	M.S. Pending-Soil Science M.S. Communication B.A. History 15 years experience	Soils
Drew Sheesley	B.S. Biology 2 years experience	Threatened and Endangered Species
Alpine Archaeological Consultants, Inc.		Cultural and Paleontological Resources

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ACRONYMS AND ABBREVIATIONS

The following acronyms and abbreviations are used in this EA:

AMP - Allotment Management Plan

AUM - Animal Unit Month

ACEC - Area of Critical Environmental Concern

BLM - Bureau of Land Management
CDH - Colorado Department of Health
CDOW - Colorado Division of Wildlife

EA - Environmental Assessment
EIS - Environmental Impact Statement

EPA - Environmental Protection Agency

FLPMA - Federal Land Policy and Management Act of 1976

GJRA - Grand Junction Resource Area
HMP - Habitat Management Plan

Hawxhurst - Hawxhurst Ranch Company
Ldn - day-night average sound level

LWCF - Land and Water Conservation Fund

msl - mean sea level mg/l - milligrams per liter

NCA - National Conservation Area

NEPA - National Environmental Policy Act of 1969

NRHP - National Register of Historic Places

OHV - off-highway vehicle

PILT - payment-in-lieu of taxes

PSD - Prevention of Significant Deterioration

PV - prospectively valuable
ROD - Record of Decision
RNA - Research Natural Area

RMP - Resource Management Plan

SCS - Soil Conservation Service
SMA - Special Management Area

SRMA - Special Recreation Management Area
SHPO - State Historic Preservation Officer

SWA - State Wildlife Area

USFWS - U.S. Fish and Wildlife Service

USFS - U.S. Forest Service
USGS - U.S. Geological Survey
VRM - Visual Resource Management
WSA - Wilderness Study Area
WRIS - Wildlife Resource Information System
WGFD - Wyoming Game and Fish Department

GLOSSARY

Active Grazing Preference - The total number of AUMs of livestock grazing on public lands apportioned and attached to the base property owned or controlled by a permittee.

Allotment - An area of land designated and managed for grazing of livestock.

Allotment Management Plan (AMP) - A documented program which applies to livestock operations on the public lands; prepared in consultation, cooperation, and coordination with the permittee(s), lessee(s), or other affected interests.

Animal Unit Month (AUM) - The amount of forage a cow and a calf (6 months of age and under) would consume in 1 month. This unit is used to calculate carrying capacity and serves as a basis for grazing fees. AUMs apply to both livestock and wildlife species.

Appraised Value or Appraised Price - Synonymous with fair market value. The amount of money specified as the minimum acceptable bid in the public notice ordering lands into the market. The determination of appraised value or appraised price is made by experienced, trained appraisers within the BLM staffs, or by contract using standard appraisal practices.

Areas of Critical Environmental Concern (ACEC) - A BLM designation pertaining to areas where specific management attention is needed to protect and prevent irreparable damage to important historical, cultural, and scenic values, fish or wildlife resources, or other natural systems or processes, or to protect human life and safety from natural hazards.

Candidate Species - An animal or plant which may be designated threatened or endangered in the near future. This status offers no legal protection under the Endangered Species Act of 1973. However, current BLM policy does direct management consistent with multiple use for conservation of candidate species and their habitats, ensuring that BLM-approved actions do not contribute to the need to list these species.

Category (1, 2, 3A, 3B, 3C) - Plants and animals being considered for federal threatened and endangered status are placed in one of the following categories:

1. Available data on biological vulnerability and threat(s) support listing, but additional data are needed on precise habitat and/or critical habitat boundaries.

- 2. Available data indicate that listing may be appropriate, but substantial data on vulnerability and threats are not available to support immediate listing.
- 3A. Probably extinct.
- 3B. Taxa do not meet the U.S. Fish and Wildlife Service definition of species; taxa may be re-evaluated in the future.
- 3C. Taxa that have proven to be more abundant or widespread than was previously believed and/or those that are not subject to any identifiable threat; further research may indicate re-evaluation to Category 1 or 2.

Contrast - The difference between adjacent parts in color and form, as used in BLM Visual Resource Management (VRM) system.

Contrast Rating, BLM - A method of determining the extent of visual impact for an existing or proposed activity that will modify any landscape feature (land and water form, vegetation, and structures).

Critical Elements - Items which must be considered in the environmental document because of law, regulation, instruction, and/or directive.

Critical Habitat - Any air, land, or water area, including elements thereof, which have been determined (and published in the Federal Register) to be essential to the survival of wild populations of an endangered or threatened species or to be necessary for their recovery to a point at which the measures provided pursuant to the Endangered Species Act are no longer necessary.

Cultural Resources - Remains of human activity, occupation, or endeavor, as reflected in sites, buildings, artifacts, ruins, etc.

Cultural Resource Inventory Classes:

Class I - Existing data inventory: an inventory study of a defined area designed 1) to provide a narrative overview (cultural resource overview) derived from existing cultural resource information, and 2) to provide a compilation of existing cultural resource site record data on which to base the development of the BLM's site record system.

Class III - An intensive field inventory designed to locate and record, from surface and exposed profile indications, all cultural resource sites within a specified area. A Class III inventory is appropriate on small project areas, all areas to be disturbed, and primary cultural resource areas.

Cumulative Impact - The impact on the environment which results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

Disposal Area - A parcel of public land that could pass from government ownership through sales or exchanges or both. Some land may be retained in public ownership based on site-specific criteria.

Endangered Species - Any animal or plant species in danger of extinction throughout all or a significant portion of its range.

Exchange - A trading of public lands (surface and/or subsurface estates) for lands in other ownerships which have value for public use, management and enjoyment. The exchange may be for the benefit of other Federal agencies as well as BLM.

Extensive Recreation Management Area - Areas of limited recreation opportunities and where intensive recreation management is not required. Minimal recreation management actions are adequate in these areas.

Federal Lands - Lands owned by the United States, without reference to how the lands were acquired or what Federal agency administers the lands, including mineral estates underlying private surface.

Federal Land Policy and Management Act of 1976 (FLPMA) - Public Law 94-579, gives the BLM legal authority to establish public land policy; to establish guidelines for administering such policy; and to provide for the management, protection, development, and enhancement of the public land.

Federal Listed Species - Animal or plant species listed by the U.S. Fish and Wildlife Service as threatened or endangered.

Fee Title - The title or ownership of land; short for "owned in fee." The owner of the fee holds title to the land.

Floodplain - The flat ground along a stream which is covered by water when the stream overflows its banks at flood stages.

Habitat - A specific set of physical conditions that surround the single species, a group of species, or a large community. In wildlife management, the major components of habitat are considered to be food, water, cover, and living space.

Habitat Management Plan (HMP) - An activity plan for a specific geographic area which identifies wildlife habitat and related objectives, establishes the sequence of actions for achieving objectives, and outlines procedures for evaluating accomplishments.

Land and Water Conservation Fund Act of 1965 (LWCF) - Established a fund to preserve, develop, and assure accessibility to outdoor recreation resources.

Legal Description - The description of a particular parcel of land according to the official plat of its cadastral survey, including Township, Range, and Section numbers in reference to its meridian.

National Environmental Policy Act of 1969 (NEPA) - Requires all Federally supported actions to fully consider environmental effects of the Proposed Action and all alternatives and to allow public and agency comments.

National Register of Historic Places (NRHP) - A list of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, and culture.

National Wild and Scenic Rivers System - Established by the Wild and Scenic Rivers Act of 1958 to protect rivers and their immediate environments that have outstanding scenic, recreation, geologic, fish and wildlife, historic, cultural, and other similar values and are preserved in free-flowing conditions. This system provides for the designation of three types of rivers:

Recreation: Rivers or sections of rivers readily accessible by road or railroad that may have some development along their shorelines and may have undergone some impoundment or diversion in the past.

Scenic: Rivers or sections of rivers free of impoundments, with shorelines or watersheds still largely undeveloped, but accessible in places by roads.

Wild: Rivers or sections of rivers free of impoundments and generally inaccessible except by trails, with essentially primitive watersheds or shorelines and unpolluted waters.

Off-Highway Vehicle (OHV) - A vehicle (including four-wheel drive, trail bikes, all-terrain vehicles, and snowmobiles but excluding helicopters, fixed-wing aircraft and boats) capable of traveling off road over land, water, ice, snow, sand, marshes and other terrain.

Offered Lands - Those lands the project proponent offers to the BLM in exchange for public land (i.e., private to BLM).

Paleontology - A science dealing with the life of past geological periods as known from fossil remains.

Payment in Lieu of Taxes (PILT) - Payments to local or state governments based on ownership of Federal land and not directly dependent on production of outputs or receipt sharing.

Plan Amendment - A change in a Resource Management Plan (RMP) initiated by the need to consider monitoring and evaluation findings, new data, new or revised policy, a change in circumstances or a Proposed Action that may result in a change in the scope of resource uses or a change in terms, conditions and decisions of the approved plan. An amendment shall be made through an EA of the proposed change or an EIS, if necessary.

Prevention of Significant Deterioration (PSD) - A regulatory program based not on the absolute levels of pollution allowable in the atmosphere but on the amount by which present air quality will be allowed to deteriorate in a given area. Under this program, geographic areas are divided into three classes, each allowing different increases in increments of total suspended particulates and sulfur dioxide concentrations.

Class I - Minimal additional deterioration in air quality (certain national parks and wilderness areas).

Class II - Moderate additional deterioration in air quality (most lands).

Class III - Greater deterioration for planned maximum growth (industrial areas).

Prime Farmland - Land that is best suited for producing food, feed, forage, fiber, and oilseed crops. The inventory of prime agricultural land is maintained by the U.S. Department of Agriculture, Soil Conservation Service.

Principal Meridian - Any of the true geographical meridians established by authority of the surveyor general of the U.S. that serves as the meridian of reference for subdividing public lands in a given region.

Proposed Action - Construction activities, alignments and other activities proposed by the applicant.

Public Land - Lands administered by the Bureau of Land Management; vacant, unappropriated, and unreserved lands which have never left Federal ownership; also, lands in Federal ownership which were obtained by the Government in exchange for public lands or for timber on public lands.

Record of Decision (ROD) - A required document that concisely reports the decision reached on an action examined through the National Environmental Policy Act process in an environmental assessment or environmental impact statement.

Recreation Visitor Day - A 12-hour period of recreation.

Resource Management Plan (RMP) - The RMP is a multiple-use plan that provides management direction for all Federal resources. The RMP establishes land areas for limited, restrictive, or exclusive use. Examples are identification of lands suitable for transfer or sale.

Riparian Habitat - A vegetative habitat comprised of trees, shrubs, grasses, or forbs distributed in narrow strands on the banks or floodplains of streams or rivers.

Scenic Quality Class, BLM - The value (A, B, or C) assigned a scenic quality rating unit by applying the scenic quality evaluation key factors which indicate the relative visual importance of the unit to the other units within the physiographic region in which it is located.

Scoping Process - An early and public process for determining the nature, significance, and range of issues to be addressed related to a Proposed Action.

Selected Lands - Those public lands that the project proponent wants to acquire (i.e., BLM to private).

Sensitive - Species not yet officially listed under the Endangered Species Act but which are undergoing a status review or are proposed for listing according to Federal Register notices published by the Secretary of the Interior or the Secretary of Commerce, or according to comparable state documents published by state officials.



Species whose populations are consistently small and widely dispersed, or whose ranges are restricted to a few localities, such that any appreciable reduction in numbers, habitat availability, or habitat condition might lead toward extinction and require effective and aggressive programs to help minimize the chance of official listings.

Special Recreation Management Area (SRMA) - Areas requiring explicit recreation management to achieve BLM's recreation objectives and to provide specific recreation opportunities. BLM's recreation investments are concentrated in these areas.

State Historic Preservation Officer (SHPO) - A position within state governments responsible for coordinating state participation in the implementation of the National Historic Preservation Act. This officer serves as an assistant and consultant when identifying cultural properties, assessing effects to them, and considering alternatives to avoid or reduce those effects.

Threatened - Any animal or plant species likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

Vegetation Type - A plant community with distinguishable characteristics described by the dominant vegetation present.

Visual Resource Management (VRM) - The planning, design, and implementation of management objectives to provide acceptable levels of visual impacts for all resource management activities.

Visual Resource Management Class, BLM - The degree of visual change that is acceptable within the characteristic landscape. It is based upon the physical and sociological characteristics of any given homogeneous area and serves as a management objective.

Wilderness - An area formally designated by Congress as part of the National Wilderness Preservation System.

Wilderness Study Area (WSA) - A roadless area or island that has been inventoried and found to have wilderness characteristics (on public lands administered by the Bureau of Land Management) as described in Section 603 of the Federal Land Policy and Management Act of 1976 and Section 2(c) of the Wilderness Act of 1964 (78 Stat. 891).

APPENDIX A

APPRAISAL PROCESS

APPRAISAL PROCESS

An appraisal is an unbiased estimate of value made by a trained professional after gathering and analyzing appropriate data, utilizing accepted appraisal practices.

Fair market value is defined as, "the most probable price in cash, terms equivalent to cash, or in other precisely revealed terms, for which the appraised property will sell in a competitive market under all conditions requisite to fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress." In simpler terms, it is "the amount in cash, or on terms reasonably equivalent to cash, for which in all probability the property would be sold by a knowledgeable owner, willing but not obligated to sell, to a knowledgeable purchaser who desired but is not obligated to buy."

One of the first and most important steps in the appraisal process is the determination of a property's highest and best use. Highest and best use is defined as, "the use, from among reasonably probable and legal alternative uses, found to be physically possible, appropriately supported, financially feasible, that results in highest land value." Highest and best use determination is used to identify comparable properties which provide a basis for comparison, analysis, and a value conclusion.

There are three approaches to value - the cost approach, the income capitalization approach, and the sales comparison (market data) approach. One or more of these approaches is used in all estimations of value, depending on the type of property, the use of the appraisal, and the quality and quantity of data available for analysis.

The cost approach involves estimating the reproduction or replacement cost of all improvements new, subtracting from these costs any accrued depreciation, and adding the land value. This approach is based on the reasonable proposition that an informed purchaser would pay no more for a property than the cost of producing a substitute property with the same utility as the subject. This approach to value is particularly useful for appraising new or nearly new improvements.

The income approach is based on the principle that value is created by the expectation of future benefits. It is based on an accurate measurement of a property's productivity under typical management, a conversion of the yields into gross and net income, and capitalization of this net income at the current market rate of interest. This approach is used for properties with a measurable income stream and where that income is the motivating factor for buying.

The most commonly accepted and reliable method of valuing vacant land is the market data, or direct sales comparison, approach. In this approach, sales of similar or "comparable" properties in relation to the subject are gathered and It is most applicable when an active market provides sufficient quantities of recent, suitable data which can be verified with reliable sources. This approach is based on the reasonable assumption that an informed purchaser would pay no more for a property than the cost of acquiring a substitute property with the same utility as the subject. The application of this approach produces a value indication for a property through comparison with similar properties (comparable sales). The sale prices of properties judged to be most comparable tend to set a range in which the value indication for the subject property falls. The appraiser estimates the degrees of similarity and difference between the subject property and comparable sales for a number of factors including conditions of sale, financing terms, market conditions (time), location, size, access, physical characteristics, and other factors that influence value in a particular market. Through this process, the appraiser derives a logical estimate of the probable price for which the subject property could be sold.

APPENDIX B

STATE HISTORIC PRESERVATION OFFICER (SHPO) CORRESPONDENCE



United States Department of the Interior



BUREAU OF LAND MANAGEMENT GRAND JUNCTION RESOURCE AREA 764 HORIZON DRIVE GRAND JUNCTION, COLORADO 81506

DEC 23 1991

In Reply Refer To: 8143 (7-630) S# 1887

APPENDIX C

CERTIFIED MAIL NO. P 872 154 184 RETURN RECEIPT REQUESTED

Ms. Susan Collins
Office of Archaeology and Historic Preservation
Colorado Historical Society
1300 Broadway
Denver, Colorado 80203

Dear Ms. Collins:

PART I. Project Description

The following undertaking is located in: T. 9 S., R. 94,95 W., Section(s) 3, 8, 9, 13, 16, 17, 18.

Project Name: <u>Hawxhurst Ranch Land Exchange</u>

This undertaking includes: The BLM has received a proposal for a land exchange from the Hawkhurst Ranch in Collbran, Colorado. The ranch through the Western Land Group, Inc. proposes to exchange land on the Colorado River for BLM managed land near Collbran. Alpine Archaeological Consultants conducted a Class III inventory of the 1090 acre parcels of public land to determine whether cultural resources eligible to the N.R.H.P. were present. Two sites, 5ME6814 and 5ME6815 were identified, but neither meets the NRHP criteria. Therefore, the BLM seeks the SHPO concurrence on the eligibility and impact of the proposed project.

Due to the above Federal undertaking (as determined by the Bureau of Land Management), and pursuant to the Programmatic Agreement (2/6/87), the BLM seeks your concurrence in the following action(s):

<u>X</u>	Determination	of	Eligibility
X	Determination	of	Effect

PART II. Determination of Eliqibility to the National Register of Historic Places. Section 106 Consultation.

The below listed cultural resources has/have been evaluated using the eligibility criteria in 36 CFR Part 60. The Bureau of Land Management has evaluated this/these site(s) as follows:

Site	Not	Need	Eligibility Criteria	SHPO	Opinion
Number	Eliqible	Data	A, B, C, D	Concur	Not Concur
5ME6814	X				
5ME6815	X			<u></u>	
<u>5ME6806-</u> 6813	X(IF's)				
0013					

PART III. Determination of Effect

Pursuant to 36 CFR part 800.5, the criteria of effect have been applied to the above sites with the following results. Please indicate your concurrence/nonconcurrence with BLM's findings:

 \underline{X} We have determined that the proposed project will have "no effect" on any listed or eligible historic properties.

Because the project(s) meet(s) the exclusions.

Because the cultural properties will be avoided.

We will retain documentation and proceed with the project if you do not respond within 10 working days.

We have determined that the proposed project will have "no adverse effect" on any listed or eligible historic properties. We will retain documentation of this determination and proceed with the project if you do not respond within 10 working days.

We have determined that the proposed project will have an "adverse effect" on any listed or eligible properties. A description of each affected resource and a mitigation plan are enclosed. Please advise use of your opinion within 10 working days so that we may proceed with the development of a preliminary case report.

BLM Authorized Officer

12 (17/4)

Date

PART IV. SHPO Concurrence/Signature

______ I hereby concur with the above Bureau of Land Management findings.

I do not concur with the above Bureau of Land Management findings.
Please see enclosed narrative.

State Historic Preservation Officer

12/30/91

Date

Please return to the Grand Junction Resource Area.

Enclosure: Alpine Archaeological Consultants report



United States Department of the Interior

BUREAU OF LAND MANAGEMENT GRAND JUNCTION DISTRICT

E 2815 H Road Grand Junction, Colorado Al506



8143 (7-161) S# 1887a

June 2, 1992

APPENDIX C

CERTIFIED MAIL NO. P 991 551 623 RETURN RECEIPT REQUESTED

Ms. Susan Collins Office of Archaeology and Historic Preservation Colorado Historical Society 1300 Broadway Denver, Colorado 80203

Dear Ms. Collins:

PART I. Project Description

The following undertaking is located in: T. 9 S., R. 94 W., Section(s) 8 and 9.

Project Name: <u>Hawxhurst land Exchange.</u>

This undertaking includes: An additional 160 acre parcel was inventoried for the above referenced project. Three isolated finds were identified.

Due to the above Federal undertaking (as determined by the Bureau of Land Management), and pursuant to the Programmatic Agreement (2/6/87), the BLM seeks your concurrence in the following action(s):

X	Determination	of	Eligibility
$-\mathbf{x}$	Determination	of	Effect

PART II. Determination of Eligibility to the National Register of Historic Places. Section 106 Consultation.

The below listed cultural resources has/have been evaluated using the eligibility criteria in 36 CFR Part 60. The Bureau of Land Management has evaluated this/these site(s) as follows:

			Eligibility	SHPO Opinion
Site	Not	Need	Criteria	· -
Number	Eligible	Data	A,B,C,D	Concur Not Concur
5ME6873	X(IF)			_10=
		÷	* **	
5ME6874	X(IF)		·	
5ME6975	X(IF)			
PART III.	Determinati	on of Effec	<u>:t</u>	
applied t	o the above	sites wit	the criteria h the following currence with B	
	n any listed Because	or eligible the project	historic prop (s) meet(s) th	roject will have "no erties. e exclusions. ill be <u>avoided</u> .
	etain documer nd within 10			he project if you do
adverse e will reta	ffect" on any in documentat	y listed or ion of this	eligible hist	roject will have "no oric properties. We and proceed with the days.
"adverse e of each af advise us	effect" on any ffected resour e of your op	y listed or rce and a mi inion with	eligible propertigation plan	roject will have an rties. A description are enclosed. Please days so that we may ase report.
BLM 2	Richard Cheo Authorized Of	nd Acting	DISTRICT MANAGE	· e

PART IV. SHPO Concurrence/Signature

I hereby concur with the above Bureau of Land Management findings.

I do not concur with the above Bureau of Land Management findings.

Please see enclosed narrative.

State Historic Preservation Officer

Date

Please return to the Grand Junction Resource Area.

Enclosure:
Alpine report

APPENDIX C

NOTICE OF INTENT TO CONSIDER AMENDMENT OF THE GRAND JUNCTION RESOURCE AREA, RESOURCE MANAGEMENT PLAN 1987 AND NOTICE OF REALTY ACTION

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT [CO-070-02-7122-09-7425]

NOTICE OF INTENT TO CONSIDER AMENDMENT OF THE GRAND JUNCTION RESOURCE AREA, RESOURCE MANAGEMENT PLAN, 1987, TO ADDRESS A PROPOSED EXCHANGE OF BUREAU OF LAND MANAGEMENT AND PRIVATE LANDS NEAR GRAND JUNCTION, COLORADO AND NOTICE OF REALTY ACTION.

AGENCY: Bureau of Land Management.

ACTION: The Notice of Intent to consider Amendment of the Grand Junction Resource Area Management Plan, 1987, FR 20233, published May 2, 1991, is superseded by this Notice of Intent/Notice of Realty Action. This Notice identifies lands considered for possible exchange, serves as a Notice of Public Meetings and Public Comment Period to further identify issues to be addressed in an Environmental Assessment on the proposed Land Exchange and Amendment.

SUMMARY: Pursuant to section 102 of the National Environmental Policy Act of 1969 and section 202 of the Federal Land Policy and Management Act of 1976 (FLPMA), the Bureau of Land Management, Grand Junction District (BLM), will consider an amendment of the Grand Junction Resource Area Resource Management Plan, 1987, and pursuant to section 206 of FLPMA, the BLM will consider for disposal by exchange certain lands in Mesa County, Colorado, and will prepare an Environmental Assessment on the proposed exchange and amendment.

SUPPLEMENTARY INFORMATION: The Plan Amendment and Environmental Assessment are being developed to consider a proposed land exchange in Mesa County, Colorado. The proposal and alternatives being considered involve the exchange of the following public lands:

Sixth Principal Meridian, Colorado

T. 9 S., R. 94 W., sec. 3, S1/2NE1/4; sec. 8, E1/2SW1/4, SE1/4; sec. 9, SW1/4; sec. 16, N1/2NW1/4;

sec. 17, NE1/4, N1/2SE1/4; sec. 18, Lots 1. 2 and 3, NE1/4, NW1/4SE1/4, NE1/4SW1/4, E1/2NW1/4.

T. 9 S., R. 95 W.,

sec. 13, SE1/4NE1/4NE1/4.

The lands described above contain 1250.34 acres, more or less. The publication of this notice in the Federal Register will segregate these lands to the extent that they will not be subject to appropriation under the public land laws, including the mining laws. As provided by the regulations at 43 CFR 2201.1(b), any subsequently tendered application, allowance of which is discretionary, shall not be considered as filed and shall be returned to the applicant. The segregative effect will terminate upon issuance of a patent, upon publication in the Federal Register of termination of the segregation, or 2 years from the date of this publication, whichever occurs first.

The offered private land in the proposal and alternatives to be addressed in the Environmental Assessment include the following:

The Grassy Gulch parcel:

Sixth Principal Meridian, Colorado

T. 9 S., R. 94 W.,

sec. 3, Lots 1, 2, 3 and 4, S1/2NW1/4, SW1/4, N1/2SE1/4, SW1/4SE1/4; sec. 10, NW1/4NE1/4, N1/2NW1/4.

The Horsethief Ranch:

Ute Meridian, Colorado

T. 1 N., R. 3 W.

sec. 7, Lots 3, 4 and 5, SW1/4NE1/4, E1//2NW1/4; sec. 8, Lots 2, 4, 5 and 6, NE1/4SE1/4, SE1/4NE1/4; sec. 9, S1/2NW1/4, NW1/4SW1/4.

The offered land described above contains approximately 1278.72 acres. To the extent the value of the offered private land exceeds the value of the selected public land, BLM may purchase the excess offered land using appropriated funds.

The exchange proposal has been made to consolidate public ownership along the Colorado River. Issues identified in the first round of scoping include: wildlife habitat, grazing, access, recreation, and socio-economic concerns.

Two public open houses will be held concerning this proposal: June 16, 1992, from 4 to 7 p.m. at the Grand Junction District Office, 2815 H Road, Grand Junction, Colorado, and June 17, 1992, from 4 to 7 p.m. at the Plateau Valley School, Highway 330, west of Collbran. For a period of 45 days from the date of this notice, interested parties may submit comments to the District Manager, Grand Junction District Office, 2815 H Road, Grand Junction, Colorado 81506. The Environmental Assessment and Record of Decision concerning the proposed Plan Amendment will be prepared following the public comment period.

FOR FURTHER INFORMATION: Any additional information concerning this proposed land exchange and Amendment of the Grand Junction Resource Area Resource Management Plan is available for review at the Grand Junction District Office, 2815 H Road, Grand Junction, Colorado, 81506, or by contacting Sue Moyer, Wildlife Biologist, at (303) 244-3000.

Richard Arcand
Richard Arcand
Acting District Manager

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